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SPOKANE, WASHINGTON

913-915 FIRST AVENUE

The Inland Seed Co. SPOKANE, WASH.

To Our Customers:

We take pleasure in handing you herewith our Annual Catalogue. Many of you have received this book regularly, and it has been a pleasure to us to see your orders coming to us each year. Our Catalogue is different from many. Not as large and highly colored, but plain and straightforward, showing things as they are. We have arranged, as near as we could, everything under each department where it belongs,, making it easier to find and easier to make out your orders.

Trusting that our Catalogue will please you, and that we will be favored with your business, Very truly yours,
THE INLAND SEED CO., we remain

Spokane, Wash.

SUGGESTIONS

LARGE ORDERS. Any dealer, market gardener, institution or individual wishing seed in large quantities is requested to mail us a list of what is wanted, an dwe will promptly return. it with the very lowest market prices. A letter of inquiry may save you dollars if you want to buy in quantity.

SEND MONEY BY Postoffice or Express Money Order, Bank Draft or Registered Letter. Postage stamps will be accepted for small amount. Money sent in any way is entirely at sender's risk.

USE ORDER BLANK in the front of the Catalog, carefully filling out the blank spaces at the top for shipping directions. - T

BE SURE TO SIGN YOUR NAME, giving postoffice and state. Do not write letters on the same sheet as orders.

NEW PARCELS POST LAW. Seeds, bulbs,, roots and plants will remain the same as heretofore—that is, two ounces for one cent—with the exception that eleven pounds can be sent instead of four.

Any fourth-class matter is mailable if not over 11 pounds in weight nor more than 72 inches in length and girth combined, nor likely to injure the mails or postal equipment or employes.

There is a flat rate of 1 cent an ounce up to four ounces, regardless of distance. Above four ounces, rates are by the pound or fraction thereof, and vary with distance, as follows:

	First Pound.	Each Add. Pound.	Eleven Pounds.
Rural route and city delivery	\$0.05	\$0.01	\$0.15
50-mile zone	05	.03	.35
150-mile zone	06	.04	.46
300-mile zone	07	.05	.57
600-mile zone	08	.06	.68
1000-mile zone		.07	.79
1400-mile zone	10	.09	1.00
1800-mile zone	11	.10	1.11
Over 1800 miles	12	.12	1,32

The postmaster general may make provisions for indemnity insurance and collection on delivery, with additional charges for such service, and may, with consent of the interstate commerce commission, after investigation, modify rates, weight and zone distances when experience has demonstrated the need therefor.

SEEDS POSTPAID BY MAIL. We send all vegetable and flower seeds in quantities of one pound or less by mail, postpaid, to any postoffice in the United States, at the prices named in this Catalog, unless otherwise stated.

PREPAY STATIONS. When you send in orders to go by freight or express be sure that you add money enough to pay freight charges if your station is a prepay, which is always the case where there is no regular agent.

GUARANTEE. Our seeds are all tested for germination, and if not up to standard are destroyed. Complaints made that seeds are no good should quite as often be attributed to other causes as to the quality of the seeds. There are hundreds of contingencies constantly arising to prevent the best seeds always giving satisfaction, such as sowing too deep, too shallow, in too wet or too dry soil; insects of all descriptions destroying the plants as soon as or before they appear; wet weather, cold weather, frosts, chemical changes in the seeds induced by temperature, etc. For the above reasons it is impracticable to guarantee seeds under all circumstances. We give no warranty, express or implied, as to description, purity, productiveness, or any matter of any seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned.

THE INLAND SEED COMPANY 913-915 First Avenue Spokane, Washington

Some Splendid New Introductions

NEW EARLY CABBAGE, COPENHAGEN MARKET

The earliest large round-headed cabbage yet introduced. The heads are of exceptionally large size for so early a variety. The plant is of vigorous habit, but compact, with short stem and few outer leaves, which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. The heads are round, very solid and of exceptionally good quality. Its earliness, compact growth, uniformity and size of head, firmness and most excellent quality combine to make Copenhagen Market the most valuable cabbage of recent introduction. We recommend tu unreservedly both for the home garden and the market gardening trade. Pkt., 10c; oz., 60c; ½ 1b., \$1.75.

DANISH "ROUNDHEAD" CABBAGE

An Earlier Shorter Stemmed Type of the Famous Danish "Ballhead"

THE ORIGINAL DANISH BALL HEAD Cabbage has become very popular with market growers on account of the extreme solidity and great weight of the heads, as well as for its superior keeping qualities. At the same time, however, there has always been more or less objection to the rather long stem of this variety. For this reason a shorter stem type has been selected and bred up until it is now very uniform. This shorter stem strain has been given the name of Danish Round Head

This variety, although of very robust growth, has rather less outer leaves than the original strain, and many growers consider it better able to resist blight. In fact, it is as vigorous in growth as the best American varieties. The heads are fully as large and even heavier, and of equally good quality, maturing about a week earlier. Heads are beautifully white when trimmed, and keep full as well when stored. Our seeds of this short stem strain is direct from the same grower in Denmark, who furnishes our long stem strain. Pkt., 10c; oz., 30c; ½ 1b., 90c; 1b., \$3.00.

DANISH GIANT OR DRY WEATHER CAULIFLOWER

This strain is offered in view of its special features recommending it as a safe crop variety. In seasons of especially dry weather, and in sections of the country where warm weather prevails, and little or no cold weather, this is a very desirable sort. It has proven itself of exceptional merit under the conditions named. It is very sure heading and second early; heads larger than "Snowball" and are snow white. Our seed is A1 and procured from the original grower in Denmark. There should be at least a portion of any large acreage planted to this variety. Pkt., 10c; ½ 0z., \$1.50; 0z., \$2.50.

DAVIS' PERFECT CUCUMBER

Of the extra long "White Spine Type," the "Davis Perfect" fulfills the requirements of the demands for this type of cucumber better than any other variety. This fact is clearly shown in the Northern States, where the Davis is the most popular cucumber of this kind. A veteran grower of outdoor and greenhouse cucumbers made the original selection, and the most desirable cucumber features, length, slimness, and dark green color are combined in this strain, together with extreme vigor in growth, and great productivity. The remarkable vigor of this variety makes it a better blight resister than other long sorts. In popular favor it stands pre-eminent among all other extra long, white spine cucumbers, both for indoor and outdoor planting. Our seed has been most carefully selected under our supervision each year, and we offer a more uniform strain each season. Pkt., 10c; oz., 15c; ½ lb., 40c; lb., \$1.25.

NEW DELICIOUS SQUASH

We are convinced that this fall and winter squash is particularly excellent in quality, and in that respect it is now by many considered even better than the Hubbard, which has been so long looked upon as the standard. The fruits are of medium size, moderately hard, usually dark green in color and are without any hard shell. The flesh is thick, becoming when cooked deep yellow in color, and very fine grained. Although when first introduced a little uneven in shape and exterior color, we have by continued and careful selection made a marked improvement in uniformity of type. Pkt., 10c; oz., 15c; ½ 1b., 40c; lb., \$1.25.

NETTED GEM POTATO

The hardiest, most vigorous in growth, most productive, and the best in table quality of all potatoes, it has proved to be unequaled for main crop. The vines are strong, with deep green foliage, making a healthy growth when other varieties are cut down by blight. In form the tubers are medium long, the eyes are small and there is very little waste in paring. The skin is thin and very smooth with the exception of very small depressions which give it the appearance of being netted and from which it derives its name. The color reminds one of a Golden Russet apple. The flesh is fine-grained and cooks up mealy white. It is very free from scab and one of the very best keepers on the market. One grower tells us that they were in excellent condition in October, one year after being dug. These potatoes command the highest prices in all markets where they have been introduced.

Price postpaid, 3 lbs., 60c; freight, 25 lbs., \$1.25; 100 lbs., \$3.00.

The Essentials to the Production of GOOD VEGETABLES AND BEAUTIFUL FLOWERS

GOOD SOIL

A rich, sandy loam is the best, but a fair degree of success may be secured from any soil which can be made rich and friable. Vegetables of the best quality cannot be grown on barren sand, a cold, hard, lump clay, nor in the shade of orchard or other trees.

LIBERAL MANURING

A soil which does not need enriching in order to produce the best results is rarely found, and very often success is in proportion to the liberality with which fertilizers have been used. Well decomposed stable manure, where straw bedding has been used is the best; manure where sawdust has been used for bedding is not so good. Often wood ashes at the rate of one peck up to one bushel to the square rod will be of great benefit. Commercial fertilizers are excellent and may be used at the rate of four to twelve pounds to the square rod, and the more concentrated forms, such as Nitrate of Soda, Guano, Dried Blood and Potash Salts, at the rate of one to six pounds to the rod, the larger amounts preferably in three or four applications and at intervals of about ten days. A mass or lump of any of the commercial fertilizers, even if it is but a quarter of an inch diameter, is liable to kill any seed or young plant which comes in contact with it, so it very important if such fertilizers be used that they be thoroughly pulverized and mixed with the soil.

THOROUGH PREPARATION

Rich soil and liberal manuring will avail little without thorough preparation. The soil must be made friable by thorough and judicious working; if this is well done, all that follows will be easy.

GOOD SEEDS PROPERLY PLANTED

There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. A seed consists of a minute plant enclosed in a hard and more or less impervious shell with a sufficient amount of food stowed in or around the germ to sustain it until it can expand its leaves, form roots and provide for itself. Moisture, heat and a certain amount of air are necessary to secure germination. The germinating seed first absorbs water and swells. The starchy matter gradually become soluble. The seed-coats are ruptured, the stemlet and bud emerge. The embryo lives for a time on the stored food, but gradually the planlet secures a foothold in the soil and gathers food for itself. Germination is complete when the plantlet is able to shift for itself. A dry seed may retain its vitality and remain unchanged for years, but after germination has commenced, a check of a day or two in the process may be fatal. There is no time in the life of a plant when it is so susceptible of injury from the over-abundance or want of sufficient heat and moisture as at the period between the commencement of germination and the formation of the first true leaves. It is just then that the gardener should aid in securing favorable conditions. These are:

FIRST—A proper and constant degree of moisture. The soil should always be moist—never wet. To secure this, cover the seed as soon as it is planted with well pulverized, freshly prepared earth, pressing it firmly over the seed. This firming of the soil is very important, as it brings the particles of earth into close contact with seeds and roots, prevents the drying out of the soil and facilitates question of the best results are obtained in small gardens by laying a board on the row and then walking upon the board, or the back of the hoe may be used; but for truck farms and fields crops, a roller is equally satisfactory.

SECONDA proper degree of heat, secured by sowing the seed when the temperature of the soil is that most favorable to the germination of the seed of that particular plant. Too high a temperature is often as detrimental as one too low. The proper temperature for each sort may be learned from a careful study of the following pages and the experiences of the most successful gardeners in your vicinity.

THIRD—Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved, the necessary air can readily reach the germinating seed and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil and can be learned only from practical experience. In general, seeds of the size of the turnip should not be covered with more than half an inch of earth pressed down, while corn may be an inch, beans an inch to two inches, and peas one to three inches deep.

FOURTH—Such a condition of soil that the ascending stem can easily penetrate it and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground and taking care never to sow fine seedswhen the ground is wet. Occasionally a heavy or long continued rain followed by a bright sun will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that the young plants will be killed. In such cases the only remedy is to plant again.

JUDICIOUS CULTIVATION

Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are young, the better, but as they develop and the roots occupy the ground, cultivation should be shallower until it becomes a mere stiring of the surface. The yield and quality of vegetables have ofen been decidedly lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for will give larger returns and be in every way more satisfactory than a much larger one poorly prepared and neglected.

THE INLAND SEED CO., 913-915 First Ave., Spokane, Wash.

ORDER BLANK

FOR NORTHERN GROWN
SEEDS FROM

The Inland Seed Co., Spokane, Wash.

No Goods Sent C. O. D. For full instructions about Ordering, see inside Front Cover.

THE INLAND SEED CO. gives no warranty, express or implied, as to description, purity, productiveness or any other matter of any seeds or bulbs they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned.

Your Name Exp. Money Order \$....

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NAME ADDRESS

This Catalogue is printed in Spokane; paper made in Spokane.

Will Or. Vrucy o

List of Standard Vegetable Seeds

-With-

General Directions for Cultivation

ARTICHOKE SEED

CULTURE-Sow in April in rich soil and transplant the following spring to permanent beds (in rows or hills) three feet apart and two feet between the plants. Green Artichoke only gives a partial crop the first season, but the beds will be bearing for years. Protect in winter by a covering of leaves or coarse manure.

GREEN GLOBE—Grown for the unripe flower neads, which are highly esteemed by epicures. Large pkg., 10c.

ARTICHOKE TUBERS

ARTICHOKE TUBERS-Planted and cultivated the same as potatoes. Of great value for feeding stock. They are as potatoes. Of great value for feeding stock. They are the best hog feed known. They are remarkable for their fattening properties, great productiveness (over one thousand bushels having been raised on one acre) and ease with which they can be grown. If hogs are turned in on them they will help themselves by rooting. One lb., postpaid, 15c; 100 lbs., \$2.50.

ASPARAGUS SEED

One ounce will sow 50 feet of drill.

CULTURE—Sow early in spring in rows one foot apart; when one year old the roots may be taken up and transplanted in permanent beds, which should be made by taking out the soil to a depth of about 16 inches, fill in with 6 inches well-rotted stable manure, then 6 inches of soil, somewhat firmed, and place the roots on the same about 10 inches apart with the roots well spread out and cover so that the crown will be about 4 inches below the surface. Keep he surface well raked to keep down the weeds until shoots start.



PALMETTO—This variety is of southern origin, very desirable on account of its earliness, bright green color, presenting an attractive appearance, excellent flavor and productiveness. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

COLUMBIA MAMMOTH WHITE-A newer, distinct and valuable variety. The stalks are white, of the largest size; very productive and early. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 25c; lb., 75c.

CONOVER'S COLOSSAL—A standard sort; quality first class, spreads less than other sorts. Yields from 10 to 30 sprouts from a single plant. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 65c.

BARR'S MAMMOTH-A favorite with market gardeners. Shoots very large, tender, quick growing, and thick to the top. Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., S5c.

BEANS

CULTURE—Beans should not be planted until the ground is warm, as cold and wet weather will cause the seed to rot. For garden culture plant four or five seeds in hills one foot apart, and the rows 18 inches apart. For field culture, make the rows 3 or 3½ feet apart, and cover with two inches mellow soil.

Do not hoe or cultivate while the plants are wet with dew or rain, as getting the leaves bespattered with earth causes rust, which injures the crop.

Wax Pod Varieties

IMPROVED GOLDEN WAX BEAN--This is the favorite early wax variety more largely used than any other. The nods are yellow, stringless, large and handsome. Very productive. Large pkt., 5c; lb. 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.25.

PROLIFIC BLACK WAX BEAN-A very early wax podded sort; pods round, stringless and of exceptionally delicate and fine quality. Large pkt., 5c; lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.25.

WARDWELL'S KIDNEY WAX BEAN-This splendid early variety has a pure wax pod, is entirely stringless, and almost rust-proof, as it holds its pods so high above the ground. Large pkt., 5c; lb., 25c postpaid, express or freight; 1 lb., 15c; 10 lbs., \$1.25.

DAVIS WHITE WAX—A hardy, rustless and immensely productive bush variety. The pods are long, nearly straight, white and handsome: cooked when young they are tender, juicy and of fine flavor. The dried bean is kidney shaped, clear white, and a favorite for baking and canning. Popular with canners and market gardeners. Pkt., 5c; lb., 25c postpaid, express or freight; 1 lb., 15c; lb. 15c 10 lbs., \$1.25.



Golden Wax.

Green Pod Varieties

EXTRA EARLY ROUND POD RED VALENTINE—The best green podded, "snap short" bean. The pods are of good quality; this is the most popular of all the green-podded beans. Large pkt., 5c; lb., 25c postpaid, express or freight; 1 lb., 15c; 10 lbs., \$1.25.

NEW STRINGLESS GREEN POD—Long, round, green pods, absolutely stringless; tender, brittle and of finest flavor. While more hardy to withstand frosts, yet it is as tender to cook as any wax pod bean. Early and productive. Pkt., 5c; lb., 25c; postpaid, express or freight; 1 lb., 15c; 10 lbs., \$1.25.

Dwarf Horticultural

DWARF HORTICULTURAL—Grows creet, strong and shrubby. The bean is highly prized, green shelled. It is rather large, plump, and beautifully mottled yellow and red. Pkt., 5c; lb., 30c postpaid, express or freight; 1 lb., 20c; 10 lbs., \$1.50.

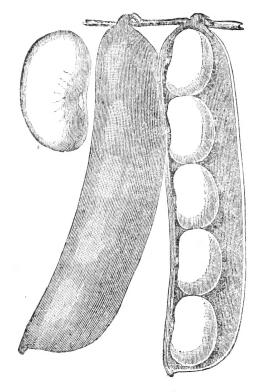
Broad Windsor.

BROAD WINDSOR—Stock erect, strong and shrubby. The bean is large, broad and flat; it is the best green shelled. Pkt., 10c; lb., 25c postpaid, express or freight; 1 lb., 15c; 10 lbs., \$1.50.

2-10 - 20-3

Burpee's Bush Lima

BURPEE'S BUSH LIMA—The true bush form of the old large Lima Pole Bean. It grows vigorously to a height of 18 to 20 inches, forming a circular bush, two or two and a half feet in diameter, requiring no boles or stakes, yielding from 50 to 150 fine pods, similar in size and quality to those grown on large White Lima Beans. Large pkt., 5c; lb., 36c postpaid. express or freight; 1 lb., 20c; 10 lbs., \$1.50.



Pole or Running Beans

LAZY WIFE—The pods are produced in large clusters in great abundance and are from four to five inches in length. Dark green, rather flat but broad outle thick, fleshy, and entirely stringless, retaining their brittleness until fully developed; of unusually rich flavor. The drv beans are pure white in color; excellent for whiter use. Lb., 30c postpaid, express or freight; 1 lb., 20c; 10 lbs., \$1.50.

LONDON HORTICULTURAL OR SPECKLED CRANBERRY—Vines moderately vicorous, with large, light-colored leaves and purple blossoms; pods short, broad, pale green but becoming streaked with bright red: beans large, ovate, splashed and spotted with wine red and of the highest quality, either dry or green. Lb., 30c postpaid; lb., 20c; 10 lbs., \$1.50.

KENTUCKY WONDER (Old Homestead)—Best variety. round and fleshy, they mature quickly and are excellent for use in green state. Fnormously productive, Lb., 30c postpaid, express or freight; 1 lb., 20c: 10 lbs., \$1.50.

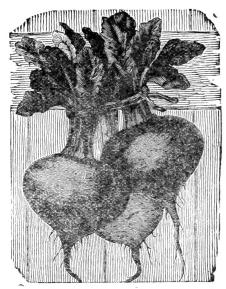
DUTCH CASE KNIFE—Good corn hill bean; very early; pods long and flat; beans, white; used green or dry. Pkt., 10c; lb., 30c postpaid; lb., 20c; 10 lbs., \$1.50.

CASTOR BEAN—Used for medicinal purposes, and by some claimed to keep moles away. Pkt. 10c; lb., 35c postpaid.

NAVY BEANS—Price, per lb., 25c postbaid. LADY WASHINGTON—Price, per lb., 25c postpaid.

BEETS

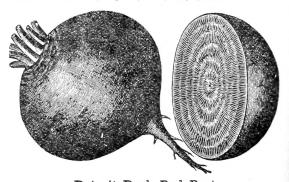
CULTURE—Sow as early in the spring as the ground can be worked, and every two weeks thereafter, up to the middle of July. For general crops, sow about the 20th of May. The soil should be deep, rich and mellow, ptowed deep and harrowed until very fine. Drop about one mendeep in drills 12 to 18 inches apart, and when well up thin to four or six inches. The tops of the young beets can be used for greens. One ounce will sow a 60-foot drill. Six pounds to the acre.



Early Blood Turnip

EXTRA EARLY EGYPTIAN—The earliest sort; turnip-shaped, small, symmetrical, deep blood color. Pkt., 5c; oz., 15c; ½ lb., 40c; lb., \$1.35.

ECLIPSE—Makes rapid growth; top small, quality fine, larger than Egyptian, but not so deep a red in color. Fkt., 5c; oz., 15c; ½ lb., 40c; lb., \$1.35.



Detroit Dark Red Beet

DETROIT DARK RED TURNIP—A fine beet for bunching for market: tops exceptionally small and uniformly up-right. The roots are perfect turnip-shape, with small tap-roots. One of the deepest red beets. Quality is of the finest; sweet and tender: best beet for home garden. Pkt., 5c; oz., 20c; ¼ lb., 45c; lb., \$1.50.

SWISS CHARD OR SEA KALE BEET—Although little known in America, this vegetable is worthy of a place in every garden. The leaf and the leaf stems are the parts used and they are much superior to those of other beets to use as greens. Later in the season the broad, flat, beautiful, wax-like stems are cooked as a salad or pickled. Pkt., 5c; oz., 20c; ½ lb., 50c; lb., \$1.60.

For Books on Gardening, see Page 74.

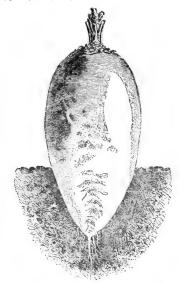
BEETS-Continued

EARLY BLOOD TURNIP—Roots turnip shaped, deep crimson, tender and sweet. Pkt., 5c; oz., 15c; ½ lb., 40c; lb., \$1.35.

IMPROVED HALF-LONG BLOOD—An old and popular variety, especially desirable for autumn and winter use. Pkt., 5c; oz., 15c; ${}^{1}\!\!\!/_{4}$ lb., 40c; lb., \$1.35.

STOCK BEETS

IMPROVED GOLDEN TANKARD—We have for years insisted that this was the best mangle grown, and each succeeding season strengthens us in the position we took when it was a comparatively unknown sort. We recommend it unqualifiedly as the best mangle by far for dairy farmers. Oz., 10c; 1/4 lb., 20c; lb., 50c. Not postpaid, 5 lbs., \$1.75.



New Mangle, One-Half Sugar

NEW MANGLE, HALF SUGAR—A new variety, very much more valuable for feeding purposes than the old sorts, it being very much richer. In addition to this, the size and form have been improved until it yields as much per acre as the best Mangles, and twice as much per acre (bulk or roots) as the rich sugar beet seed; is much easier handled, keeps better and is in every way most valuable to the farmer. Roots large, ovoid in form, very smooth, with few rootlets; light, pink or rose color, with smait top. Oz., 19c; ½ lb., 20c; lb., 59c; express or freight, 5 lbs., \$1.75.

IMPROVED MAMMOTH LONG RED—Our stock is a great improvement on the old variety; the roots are very large, uniformly straight and well formed; color deep red roots solid and tops small; roots attain a large size, one being exhibited last year which weighed 58 pounds; produce an immense bulk and tonnage. Oz., 10c; ½ lb., 20c; lb., 50c. Not postpaid, 5 lbs., \$1.75.

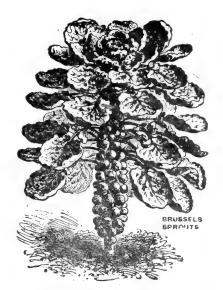
Sugar Beets

KLEIN WAULEBEN—A hardy and earlier grown variety, which is generally acknowledged to be the best to grow for the manufacture of sugar. Oz., 10c 1/4 lb., 15c; lb., 45c.

BROCCOLI

Sow early in spring. Transplant and cultivate the same as cabbage. The broccoli is similar to the cauliflower. They will produce heads in October and November, and should any plant not be forward enough for use before severe frosts, let them be removed to a light cellar, where they will head during the winter.

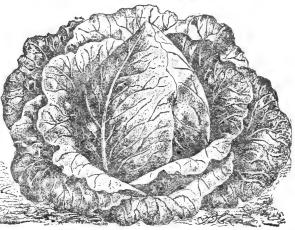
LARGE WHITE MAMMOTH—Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.



BRUSSELS SPROUTS

Cultivated for the small heads that grow in considerable numbers from the main stem. It is a delicacy mucn esteemed by some. Sow in seed bed middle of spring and transplant and manage as winter cabbage. Pkt., *5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Cabbage



Early Jersey Wakeheld

CULTURE—For early cabbages sow the seed in a hothed in March or April, covering the seed from ½ to ½ an inch deep and, when big enough, transplant to another bed. As soon as the ground is in good condition transplant, outside, in rows 2 feet apart and 15 to 20 inches in the row. The soil should be mellow rich and well drained. For late crop the seed can be sowed in a cold frame, or even in the open ground, and then transplanted in rows 3 feet one way and 2 feet the other, so as to be able to work with a horse and cultivator.

First Early Cabbages

EARLY JERSEY WAKEFIELD—The earliest and nardiest heading of extra early cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Heads conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit make it the best sort for very early setting. Pkt., 5c; oz., 20c; 2 oz., 35c; ¼ 1b., 60c; ¼ 1b., \$1.00; 1b., \$1.75.

See Page 74 for Cultural Directions.

CABBAGE—Continued

CHARLESTON OR LARGE WAKEFIELD—Larger and a little later than the Early Jersey Wakefield, but having the same general shape, except that it is less pointed. A good sort for market gardeners. Pkt., 5c; oz., 25c; 2 oz., 40c; ½ lb., 65c; lb., \$2.00.

EARLY WINNINGSTADT—A desirable kind, having conical, solid heads; a sure header under almost any conditions, and keeps better than most early varieties. Fine and of excellent quality. Pkt., 5c; oz., 20c; 2 oz., 35c; ½4 lb., 60c; lb., \$1.75.

HENDERSON'S EARLY SUMMER—About 10 days later than the Jersey Wakefield. The head is round, and the largest of the early kinds; can be set close in the row as the outer leaves are small. It remains long without bursting; is firm and of the best quality. Pkt., 5c; 0z., 20c; 2 0z., 35c; $\frac{1}{4}$ 1b., 65c; 1b., \$2.00.

DANISH SUMMER BALLHEAD—The Danish Summer Ballhead Cabbage is taking the place among the carly varieties that the Danish Ballhead holds among the later sorts. It is a second early, extremely hard, long-keeping and of superb quality, and on light soil does particularly well, being a sure header. It resembles the Winter Ballhead quite closely, excepting that it is smaller and slightly flat on top. It has traces of curliness on the outside leaves and delicate flavor that suggests Savoy blood. Color is light green, very small with fine ribs in the leaves. Pkt., 10c; oz., 35c; ½1b., 85c; lb., \$2.75.

GLORY OF ENKHUIZEN—A comparatively new second early variety, very sure heading and of excellent quality. Plant of vigorous growth, with large, rather spreading outer leaves which are noticeably curved. Head globular or very nearly round, very solid and of large size for so early a variety. Pkt., 5c; oz., 20c; ½ lb., 75c; lb., \$2.50.

New Early Cabbage (Copenhagen Market)

This superb new Cabbage created quite a sensation at Fordhook Farms during the past season. One visitor who came from Illinois especially to visit the trial grounds said he could easily sell 40 pounds of the seed at \$10 per pound to his neighboring market gardeners. It is undoubtedly without a rival as the finest large round-headed early Cabbage in cultivation. The type is thoroughly fixed, the heads maturing all at the same time (this being a great consideration to market gardeners, entailing less labor in harvesting the crop, and allows the ground to be cleared at the first cutting). The heads average about 10 pounds each in weight, are very solid, with small core and of fine quality. It matures as early as Charleston Wakefield, and will give a much heavier yield per acre that popular variety. The plant is short-stemmed, ground level. The leaves are light green, rather small, saucer-shaped, and always tightly folded. The plants, therefore, can be set closer than is usual with varieties of similar size. Pkt., 10c; 0z., 50c; ¼ 1b., \$1.75.

ALL-HEAD EARLY—It is among the earliest of the large cabbages. It is fully one-third larger than the Early Summer. The deep flat heads are remarkably solid and uniform in color, as well as shape and size. It is very tender and of fine quality. Pkt., 5c; 0z., 20c; ½ lb., 65c; lb., \$2.00.

Late or Fall Sorts

SELECTED LATE FLAT DUTCH—A low-growing variety; heads large, bluish green, round, solid, broad and flat on top; an excellent fall and winter variety and a good keeper; it is a sure header. Our stock has been grown from carefully selected heads, and we consider it superior to any other strain of Flat Dutch Cabbage on the market. Large pkt., 5c; oz., 20c; ½ lb., 55c; lb., \$1.75.

PREMIUM LATE DRUMHEAD—A sure heading sort, which in good, rich soil will grow to an enormous size and on poorer soils will give good-sized heads which are very compact, solid and of excellent flavor. Pkt., 5c; oz., 20c; ½ lb., 60c; ½ lb., \$1.00; lb., \$1.75.

SUREHEAD—A popular sort for main crop; never 1a1ls to form uniformly large. solid heads, which are tender and of fine, sweet flavor. An excellent keeper and a good shipper. Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00.

DRUMHEAD SAVOY—Fine quality. Pkt., 5c; oz., 15c;

 $\frac{1}{4}$ lb., 50c; lb., \$1.50. ROCK RED—Best red sort, much used for pickling. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.00.

DANISH BALT.HEAD. SEED—American grown. Pkt., 5c; oz., 20c; ½ lb., 60c; lb., \$2.00.

See Page 74 for Cultural Directions.



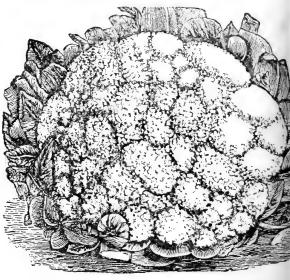
DANISH BALL HEAD.

CLOVER LEAF HOLLAND OR DANISH BALLHEAD

Genuine Danish grown stock, short stems. Most remarkable late cabbage yet produced. This is one of the hardiest cabbages in cultivation, and endures both frost and drought that would destroy other varieties. Plants very hardy and compact; leaves very smooth, but thick; head of medium size, round and very solid, being the hardiest heading cabbage we know of, and of the very best quality. Matures quite late, keeps well and is considered by many the best cabbage to hold over for spring markets. Pkt., 10c; 0z., 25c; ½ lb., 85c; lb., \$2.75

DANISH ROUNDHEAD—An earlier, shorter stemmed, improved strain of the Danish Ballhead Cabbage. The heads are hard and very solid and mature about two weeks in advance of the Ballhead. They also average a little larger and heavier. The inner leaves are blanched almost pure white, are of sweet flavor, crisp and tender. It is less liable to blight and shows vigorous growth even in the hot summer. Pkt., 5c; oz., 30c; ½ lb., 90c; lb., \$3.00.

Cauliflower



CAULIFLOWER—Continued

Early Snowball

CULTURE—The soil for cauliflower should be like that for cabbage, but is better if made richer than is ordinarily used for that crop. Give the plants thorough culture and used for that crop. Give the plants thorough culture and keep free from worms, with insect powder. For late crop sow at same time as for late cabbage, and treat in the same manner. It should be borne in mind that cauliflower will not head up good in hot, dry weather, and hence the sowings should be so regulated as to bring it to maturity sowings should be so regulated as to bring it to maturity either before the hot summer weather sets in or not until the cooler weather of the fall. If it receives at this time a liberal supply of water, the size and quality of the heads will be greatly improved. After the heads begin to form, draw the leaves over and pin or tie them together to protect the heads from the sun and keep them white. The heads should be cut for use while the "curd" is compact and hard, as they soon become tough and bitter after they open and separate into branches.

CLOVER LEAF EARLY SNOWBALL (Best Imported CLOVER LEAF EARLY SNOWBALL (Best Imported Strain)—This is an improved extra early strain of dwart, compact growth. Under favorable circumstances nearly every plant will make a fine, solid head of good size. It is valuable for both early and late. Pkt. 10c; ½ 0z., \$1.25; 0z., \$2.25; ¼ lb., \$8.00.

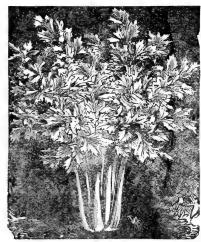
DANISH GIANT OR DRY WEATHER—Large leaved and large flowering, with pure white compact heads. For open ground and forcing. Two weeks later than above, when planted at same time. Very resisting against unfavorable seasons and dry weather. Pkt., 10c; ½ 0z., \$1.50; 0z., \$2.50.

oz., \$2.50.

EXTRA EARLY DWARF ERFURT-Very dwarf, sure to head and one of the earliest. The heads are of good size, pure white, very solid, of excellent quality and delicate flavor. Pkt., 10c; oz., \$2.00.

AUTUMN GIANT-A distinct and valuable late variety The heads are reasonably large, beautifully white, firm and compact, and, being well protected by foliage, remain for a long time fit to use. The plants should be started and transplanted early in the season to insure their full development. Pkt., 5c; oz., 60c; ¼ 1b., \$2.00.

Celery



White Plume Celery.

CULTURE-One ounce will produce about 3.000 plants CULTURE—One ounce will produce about 3,000 plants and sow about 200 feet of row. Sow in light, rich soil, in shallow drills, and cover the seed lightly with finely sifted mold. Prick the seedling out into beds of very rich soil, 3 inches apart. Water freely and shade from the sun until established. When the plants are 5 to 6 inches high transplant to rows 3 to 4 feet apart, according to the variety, allowing 8 inches between the plants in the row. Cultivate freely and earth up to blanch the stems, pressing the soil firmly around the plant almost to the top, care being taken not to cover the tops of the center shoots. Remember that this crop well repays generous treatment. member that this crop well repays generous treatment.

WHITE PLUME—French grown. A new variety; popular on account of its naturally white leaf stalks, which require less blanching than the other kinds. Tie the tops together and hill up the earth slightly. Its handsome.

plume-like top is very ornamental on the table. It is quite early and a fine market sort. Pkt., 5c; oz., 25c $\frac{1}{4}$ lb., 75c; lb., \$2.50.

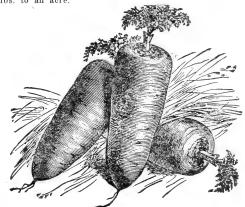
GOLDEN SELF-BLANCHING-French grown. riety somewhat resembling the White Plume, and, like it, requiring but little earthing to secure perfect blanching. It is of a rich, golden tint when ready for the table; very handsome and of excellent quality. Pkt., 10c; oz., 60c; 1/4 lb., \$2.00.

GIANT PASCAL—A standard sort for later or winter market; large fine stalks; when blanched, of a deep golden yellow. Pkt., 5c; oz., 20c; ½ lb., 50c; lb., \$1.50.

CELERIAC, OR TURNIP-ROOTED-Grown exclusively for its roots, which are turnip-shaped, very smooth, tender and marrow-like. The roots are cooked and sliced; used with vinegar they make an excellent salad. Pkt., 5c; z., 20c; 1/4 lb., 60c.

Carrots

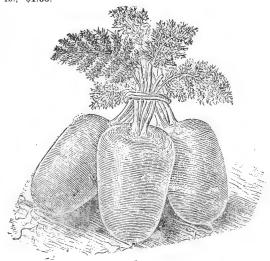
CULTURE—The carrot, like other root crops, delights in a sandy loam, deeply tilled. For early crops, sow in the spring as soon as the ground is in good working order; for late crops they may be sown at any time until the middle f June. Sow in rows, about 15 inches apart, thinning out 3 inches between plants. One ounce to 150 feet of drill: 3 lbs. to an acre.



DANVERS HALF-LONG.

EARLY SCARLET HORN—A very early variety. Recommended for the market and family garden. Texture fine; very delicate in flavor. Pkt., 5c; oz., 15c; 1/4lb., 35c; lb., \$1.10.

CHANTENAY-As a table variety it is first class; in shape it is larger than the Scarlet Horn, and also broader at the shoulder. The flesh is of a beautiful rich orange color and of finest quality. Fkt., 5c; 02., 15c; ¼ lb., 35c;



Oxheart

CARROTS—Continued

GUERANDE, OR OX HEART—A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor, and a variety that we can recommend to all market gardeners. Pkt., 5c; oz., 15c; ½ b., 35c; lb., \$1.00.

IMPROVED DANVERS HALF-LONG—A first-class carrot for all soils; in form midway between the Long Orange and Short Horn. The root is of a rich, dark orange color and grows very smooth and handsome, 20 to 30 tons per acre being not an unusual crop. Pkt., 5c; 02., 15c; ¼ 1b., 35c; 1b., \$1.00.

LONG ORANGE IMPROVED—Very desirable for garden or field culture. Pkt. 5c; oz., 15c; ½, lb., 35c; lb., \$1.00.

STOCK CARROTS

LARGE WHITE BELGIAN—Grows one-third out of the ground; root pure white, green above ground, with small top; flesh rather coarse; the roots, on light, rich ground, grow to a large size, and are extensively grown for stock feeding. Pkt., 5c; oz., 10c; ½ lb., 30c; lb., 8:c.

MASTODON CARROT—The flesh is white, crisp, solid and very sweet in flavor. It is a vast improvement on the white and green Belgian sorts, which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. Oz., 10c; ½ 1b., 30c; 1b., 85c.

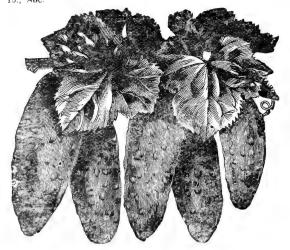
YELLOW GIANT—This new carrot is half-long variety, with an immense broad shoulder. The carrot penetrates less than one-half the depth into the ground. The importance of this point should not be overlooked, as it saves about one-half the expense in the harvesting of the crop. The color is a bright yellow, and is perfection for giving the proper color to your butter. Oz., 15c; ½ 1b., 30c; 1b., 85c.

Cucumbers

For very early cucumbers, sow the first of April in a hotbed upon pieces of sod (grass side down), so that they can be readily transplanted to the open ground, in rich soil, when danger of frost is over, or protect by handglasses. For early use, plant, if the weather has become settled and warm, in hills about four feet apart each way; thin out to four of the strongest plants to each hill, after all danger from insects is over; they succeed best in warm, moist, rich, loamy soil; continue planting at intervals for a succession. The cucumbers should be gathered when large enough to use, whether required or not; if let to ripen it destroys their productiveness. For pickles, plant from June until the middle of July.

EARLY CLUSTER—A short, prickly variety; usually grows in clusters. Is a prolific bearer, and, except the Early Russian, is the earliest sort; flavor excellent. Pkt., 5c; oz., 10c; ½ lb., 25c; lb., 75c.

COOL AND CRISP—A strain of the White Spine, but longer and more cylindrical; very early and exceedingly prolific. While it is esteemed most highly as a pickling sort, it is one of the very best for slicing, being tender, crisp and of fine flavor. Pkt., 5c; oz., 10c; 1/4 lb., 25c;



EARLY SHORT GREEN, OR EARLY FRAME—A vigorous and productive variety, producing fruit of medium size and regular form; flesh crisp and tender; excellent for the table or pickling when small. Pkt., 5c; oz., 10c; ½ lb., 25c; lb., 75c.

EARLY WHITE SPINE—One of the best sorts for table use; fruiting early and abundantly; fruit uniformly straight and handsome, light green, with a few white spines. Pkt., 5c; oz., 10c; ½ lb., 25c; lb., 75c.

THE NEW DAVIS PERFECT—This cucumber has an ideal shape and a beautiful dark green color, which it holds extremely well during the slicing season. Its eating qualities are unsurpassed, both because of its fine flavor and its small number of seeds which, during the slicing period, are so small and tender as to be practically unnoticed; believe it will produce more fruit than any other variety ever grown. Pkt., 10c; 0z., 15c; ½ lb., 40c; lb., \$1.25.

LONG GREEN—A popular variety for pickling and slicing. Large pkt., 5c; oz., $10c; \frac{1}{4}$ lb., 25c; lb., 80c.

BOSTON PICKLING—This variety is very popular with our gardeners to grow for pickles. Fruit smal, smooth, bright green and good quality. A great producer. Pkt., 5c; oz., 10c; ½ lb., 25c; lb., 80c.

WEST INDIA GHERKIN—This variety used exclusively for pickling, a distinct specias from the common cucumber. It is a vigorous grower and consequently should be planted 6 feet apart. The fruit is very small, almost round and closely covered with spines. Pkt., 5c; oz., 20c; ¼ lb., 60c.

JAPANESE CLIMBING—A sort of pole cucumber, its name being due to its tendency to climb and bear its fruit up from the ground, if afforded support; fruit large and thick. Pkt., 5c.

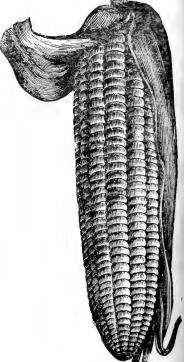
Sweet Corn

CULTURE - AII varieties of sweet corn may be either sown in rows, 4½ feet apart, and the sown in rows. planted about seeds 8 inches in a row, or planted in hills at a distance of 3 or 4 feet each way, according to the variety grown or the richness of the soil in which it is planted. Sweet corn should not be planted deeper than one men to one inch and a half, as it is liable to rot in the ground. Hoe often, drawing the earth against the stems and break off the side shoots. One quart to 300 hills. About ¼ bushel will plant an acre drills.

First Early Varieties

PEEP O' DAY NEW SWEET CORN
—Ten days earlier than any other; sweet, early, productive. You will not be disappointed in this new sweet corn. Recently introduced. Has pleased everyone who has tried it. For flavor, sweetness and productiveness it is shead of any other early white sweet corn. It will prove

as ahead of any other early white sweet corn. It will prove a money-maker for the market gardener, and a valuable addition to our list of corn for our short western summers. Lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.25.



SWEET CORN-Continued

GOLDEN BANTAM—Of extreme hardiness, this can be planted earlier than any other true sweet corn, and will then produce the earliest supply of ears for the table. Planted later it does not develop so quickly as Early Fordhook or Cory, but is vastly superior in rich, sweet flavor. By repeated plantings, Golden Bantam alone will furnish a constant supply of the finest ears throughout the entire season. The stalks grow from three and one-half to four feet in height and produce one or two good cars on each stalk. The ears are about six inches in length completely filled with eight rows of golden-yellow grains, extending to the rounded tip. The flavor is exceptionally rich and sugary, "the sweetest of all." Ptt., 5c; lb., 25c postpaid, express or freight; lb., 15c; 10 lbs.,

EARLY MINNESOTA—A splendid and standard variety; cars are good size, the grains sweet and tender. Lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.00.

WHITE COB CORY—An improvement on the Red Cobbed Cory, as well as being equally early. The ears are larger and it has further advantage of having both a white cob and a white grain. A splendid market garden variety and excellent for the table. Pkt., 5c; lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.00.

Medium Early Varieties

FERRY'S NEW EARLY FVERGREEN—As 18 well known, the famous Evergreen Sweet Corn originated over 20 years ago, but while it is the best variety of late sweet corn, no effort has ever been made to improve it in earliness until now. In the New Early Evergreen we have a selection possessing every good quality of Stowell's Evergreen, and resembling it in every respect, except that the stalk is about one foot shorter, more closely jointed, and that it will mature for market 10 to 14 days earlier. It is certainly a valuable addition to the corn list, and we advise our customers to try this variety. Pkt., 5c; lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.50.

WHITE MEXICAN—This new variety of recent introduction is four or five days earlier than the White Cob Cory and has all the delicious sweetnes of Black Mexican, which before the introduction of this new white corn was said to be the sweetest of all sweet corns. It is a grand acquisition for the market gardener, as well as for the home planter. Lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.25.

Late Varieties

STOWELL'S EVERGREE —The standard main crop variety. Large, well formed ears, deep grained; very sweet and sugary. It is hardy and productive and altogether the best kind for general use. Pkt., 5c; lb., 25c postpaid, express or freight; lb., 15c; 10 lbs., \$1.00.

Field Seed Corn

A few years ago very little corn was grown in this country and if anyone had made the assertion that 50 bushels or more of corn would be grown per acre he would have been laughed at. Different parties have told us this year that they had 60 bushels per acre. Through experiments and tests carried on for a number or years, this year I have three varieties of acclimated home-grown corn to offer. It has been proven that home-grown, accumated corn ripens from two to three weeks earlier tnan eastern corn. Therefore, if you wish to grow corn to maturity it is essential that you use home production. 11 you wish an ensilage or fodder corn, some of the later eastern grown varieties produce more per acre. Last year was a poor corn year here, and the demand was so great that we were simply unable to fill orders. At the present time the prospects are good for fair quantities of varietiest listed, but to insure delivery it is best to place orders eearly.

For Books on Gardening, see Page 74.

MINNESOTA KING (Home Grown)
—We regard this corn in some respects as the most valuable early corn for the vicinity. It seems to possess a faculty of growing right along and making a crop during weather and under conditions that would ruin other varieties. In appearance the Minnesota King is remarkably distinct, being a half yellow dent, the kernels are very broad and are a rich golden color. Lb., 20c; 3 lbs., 50c postpaid. By express or freight, 10 lbs., 60c; 100 lbs., \$3.50.

NORTHWESTERN GOLDEN DENT (Home Grown)—This corn is truly a home product, having been brought up to its present standard by an enterprising farmer in Northern Idaho. Many years ago he brought with him a yellow dent corn which he planted. It proved to be too late a variety and very little matured. The following year he procured a very early golden dent corn and planted a hill of it, then a hill of the yellow dent. The result has been a beautiful Golden Dent that matures and yields well here. Per lb., 20c, postpaid. By express or freight, 10 lbs., 75c; 169 lbs., \$4.59.

FLINT YELLOW EARLY EIGHT-ROWED, OR EARLY CANADA—The great Yellow Flint Corn—the corn for the extreme north. The greatest of all the Flint varieties. Earls long, of rich yellow color. Will prove to be of the greatest value to the farmers of the far north. Ripens earlier than any of the Flints. Don't fail to try it if you want a big yielding Flint Corn. Per lb., 10c; 10 lbs., 75c: 100 lbs., \$4.50.



MINNESOTA KING

FODDER CORN-Eastern Grown

PRIDE OF THE NORTH—(Yellow Dent)—This is a standard early variety of corn in the east, but is not sure to mature here; in fact, we have been unable to procure any home-grown seed. From the fact that it produces a large amount of fodder and being early enough to get in proper condition for ensilage, it has taken the lead over all other corns for this purpose. By express or freight, 10 lts., 60c; 100 lbs., \$3.50.

Pop Corn

CRESS

A delicate, pungent salad plant, very agreeable alone or mixed with other salads. Entirely distinct from common cress, thriving only where its roots are submerged. Sow the seed thinly along the banks of any shallow stream early in the spring. It will increase rapidly if the conditions are favorable, and reappear every spring with no further attention.

TRUE WATER—Per oz., 30c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75; lb., \$3.25.

CRESS, OR PEPPER GRASS—The leaves, when young, have a warm, pungent taste, and are used as a salad, either alone or mixed with other salad plants. The seed germinates quickly and the plants grow rapidly. As they are milder and more tender when young, the seed should be sown at intervals of 10 to 15 days, making the first sowing as soon as the ground can be prepared. May be cut several times.

CURLED—The best garden variety. Per oz., 10c $\frac{1}{4}$ lb., 25c; lb., 60c.

ENDIVE



ENDIVE—A desirable salad when bleached by exclusion from the sun. Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

EGG PLANT

CULTURE—Sow in hotbeds very early in the spring; thin them out as soon as big enough to be handled to 3 or 4 inches each way, and transplant to 2 or 3 feet apart in very rich, warm ground. Do not plant them outside till nights are real warm, as the least frost will, if it does not kill them, check the growth, and it will take two or three weeks before they get over it. Hoe often and hill up gradually till they blossom. One sunce to 1 500 plants.



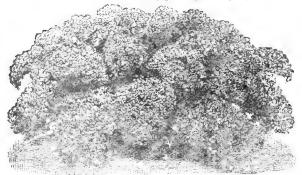
Improved New York Purple Egg Plant

BLACK BEAUTY—This beautiful egg plant is 10 days earlier than the New York Improved. The fruit is broad earlier than the New York Improved. The fruit is broad and thick, of most attractive form and does not fade or change to a lighter color at the blossom end. The fruits set freely and are ready for market early, so the crop can be gathered before danger of frost. Per pkg., 10c; 1 oz., 40c; ½ lb., \$1.40.

NEW YORK IMPROVED—This is a standard variety, both for market and home garden; a favorite everywhere. Our stock is extra selected, direct from the best growers in New Jersey. Per pkg., 5c; 1 oz., 40c; ½ lb., \$1.25.

GARLIC

Used same as onions. Sets, per 1b., 20c: postpaid, 30c.



KALE OR BORECOLE

Kale, or Borecole, is a kind of cabbage that does not form a close and solid head, but a cluster of beautifully curled or wrinkled leaves, that are tender and of excellent flavor. It requires the same treatment as cabbage, and is very hardy, being improved by frost.

Kale

TALL GREEN CURLED SCOTCH-Produces an abundance of dark green, curled leaves. Very hardy. The leading variety. Pkt., 5c; oz., 15c; 2 oz., 20c; 1/4 lb., 30c.

DWARF GREEN CURLED OR GERMAN GREENS-A dwarf variety, finer and more compact than the Scotch. Can be sown in the fall, for use early in the spring. Pkt., 5c; ofi., 15c; 2 oz., 20c; ½ lb., 30c.

THOUSAND HEADED KALE—The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific coast dairy and stockmen; endorsed by agricultural colleges and government stations. Postpaid, 1 oz., 10c; ½ lb., 20c; 1 lb., 60c.

KOHL-RABI

Or Turnip-Rooted Cabbage

The Kohl-Rabi is a vegetable intermediate between the cabbage and turnip, and combines the flavor of each. The edible part is a turnipshaped bulb, formed by the enlargement of the stem. When used for the table this should be cut when quite small, as it is then very tender and delicate, but if allowed to reach its full size it becomes tough and stringy.

EARLY WHITE VIENNA

—The earliest and best for forcing; very tender; excellent for table use. Pkt., 5c; oz., 20c; lb., \$60.



LETTUCE

CULTURE—The early sowing may be made under glass, in January and February, keeping the plants thin and admitting plenty of air every fine day. For a succession, outside, sow every two weeks as soon as the ground is open, in drills one foot apart, covering the seeds about one-quarter of an inch deep and thinning out to 6 or 8 inches in the row. For a cut salad sow thicker and do not thin out. They do best in rich and moist soil. One ounce to 3,000 plants.



Early and Forcing Varieties

MAY KING—The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of six to seven inches with the broad, light green outer leaves folding closely about the round solid head; in cool weather the edges of these outer leaves are lightly tinged with brown. The inner leaves (practically the entire head) are blanched to a rich golden yellow and have a specially fine, rich, buttery flavor. The round solid heads are so firmly folded that they can be shipped to distant markets and arrive in good condition. We recommend repeated plantings of this new early variety in the spring, and again during August and September for fall use. Pkt., 5c; oz., 10c; ½ lb., 30c; 1 lb., \$1.00.

10-

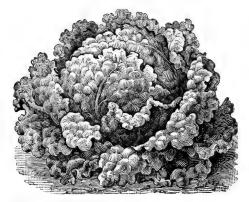
LETTUCE—Continued

BIG BOSTON—It is an early variety of Head Lettuce either for foreing or open ground. It forms large, solid heads of a good light green color, and is very stow to go to seed. The leaves are beautifully marked and blistered and very crisp and tender and of excellent flavor. By these blistered leaves it distinguishes itself from any other kind of lettuee now grown. The shape of the head resembles somewhat the Hanson, but is more oblong. This stock is grown expressly for gardeners' use. Buy from us and get the true stock. Pkt., 5c; oz., 10c; ½ lb., 30c; lb., \$1.00.

GRAND RAPIDS (Seed Black)—As a lettuce for green-house forcing, this variety undoubtedly stands at the head of the list, being of quick growth, little liable to rot and standing for some days after being ready to cut. The plant is upright and forms a loose head or cluster of large, bright leaves, slightly crimped and blistered and rather thin. The leaves do not wilt quickly after cutting, so that the variety will stand shipping long distances better than most sorts. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Loosehead or Cutting Varieties

PRIZEHEAD (W. S.)—Large, loose-headed sort, the leaves are tinged with brown, very heavy. Pkt., 5c; oz., $10c; \frac{1}{4}$ lb., 30c; lb., \$1.00.



EARLY CURLED SILESIA—One of the best curled varieties, either for forcing or for early sowing out of doors. Very popular with market gardeners and private planters. Pkt., 5c; oz., 10c; ½ 1b., 30c; lb., \$1.00.

BLACK-SEEDED SIMPSON—Very large, loose heads of curly, golden-yellow leaves, which are thin and tender. It stands summer heat splendidly and is valued for frame culture. Pkt., 5c; oz., 10c; ½ lb., 30c; lb., \$1.00.

Butterhead Lettuce

SALAMANDER—A bright green attractive summer variety, producing large, solid heads, very smooth, tender leaves, and of the finest quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., $\frac{1}{4}$ 10.

Solid Crop Head Lettuce

IMPROVED HANSON—We have a very nne stock of this variety, and can recommend it as one of the best on our list. It is a fine heading variety of the largest size; solid, sweet, tender and crisp throughout, and en-tirely free from any bitter taste; for home use one of the best lettuces known. Pkt., 5c; zz., 10c; ½, 1b., 30c; lb., \$1.00.

ICEBERG—Has an unusually solid head. The white main ribs of the leaves curve toward the center, which keeps the interior thoroughly bleached. It is quickly growing and always crisp and tender, whether propagated in early spring or in the hot days of summer. Pkt., 5c; oz., 10c; ½ 1b., 30c; lb., \$1.00.

CRISP-AS-ICE—It is a beautiful lettuce of the cabbage type. The solid heads are of great size, and leaves so tender and brittle as to have suggested the name bestowed upon it. The head has a rich, yellow heart. The leaves are thick and glossy, somewhat curled, of a good and attractive green color, variegated with bronze. This lettuce cannot be overestimated or overpraised for home use in spring and summer. Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., \$1.00.

Cos Lettuce

PARIS WHITE COS—The Cos lettuce differs entirely in shape from other varieties, the head being elongated and of conical form, eight or nine inches in height and five or six inches in diameter. The outer coloring of this variety is yellowish green. To be had in perfection it requires to be tied up to insure blanching. Millions of this variety are annually grown to supply the markets of London alone. This variety is the best of all Cos varieties. All of the foregoing lettuce, unless otherwise quoted: Per pkt., 5c; oz., 10c; 3/4 lb., 35c; 1/2 lb., 55c; 1 lb., \$1.00.



LEEK

One ounce will sow 100 feet of drill.

LARGE LONDON, OR SCOTCH FLAG—This leek is reported more delicate than the onion for soup, etc. Sown in seedbed middle of spring; when the plants are three or four inches high, transplant them into rows wide enough apart to admit the hoe between them. With good culture they may be grown five or six inches in circumference. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.30.



MUSTARD

Used alone as 'greens' or with cress as salad. Sow any time in the spring, in rows, and thin out as necessary.

SOUTHERN GIANT CURLED—We offer a very fine strain of the true curled leaf. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

WHITE ENGLISH MUSTARD—Leaves mild and tender when young; seeds yellow. Pkg., 5c; oz., 10c; 1/4 lb., 15c; 1 lb., 35c.

MUSHROOM SPAWN

With intelligent care and good spawn, mushrooms can be made to pay handsomely. They can be successfully grown in a dry cellar, under the benches of a greenhouse, or in sheds where the temperature can be kept from 50 to 60 degrees through the winter.

LAMBERT'S PURE CULTURE

-A new kind of spawn, without a doubt the best: much superior to the common English. It comes in bricks, weighing about 20 ounces.

These are broken up into pieces the size of a walnut and put into the bed one foot apart each way. White, cream, brown or light brown. Per brick, 25c; postpaid, 35c; by express, not prepaid, 5 bricks, \$1.00.

Illustrated book on Mushroom Culture, containing the latest methods of vaccing preserves.

latest methods of raising, preserving and cooking mush-

rooms, 15c, pstpaid.



CULTURE-Musk melons do best on newly broken sod or prairie land, or on soil prepared by plowing under a crop of rye or wheat in the spring. The seed should not be planted until the soil has become thoroughly warmed, about corn-planting time. Plant five or six seeds to the hill, in hills four to six feet apart. Rich soil or wellrotted manure should be used in the hills; when the plants are of sufficient size, thin out to three vines to the hill. After the vines have grown about a foot long, pinch off the ends: this will cause them to become stronger and to throw out branches.

Green-Fleshed Varieties

HACKENSACK EXTRA EARLY IMPROVED-A selec-HAUKENSAUK EXTRA EARLY IMPROVED—A selection from and an improvement on the old Hackensack, and similar in shape and appearance; nearly as large and fully 10 days earlier; one of the finest for market gardeners; quality pefect. Pkt., 5c; oz., 15c; ½ lb., 35c; lb., \$1.00.

EARLY PROLIFIC NUTMEG—Fruit of medium size, slightly ribbed, globular. Skin dark green, becoming yellow when overripe, and nearly covered with broad, shallow netting. Pkt., 5c; 0z., 15c; ½ 1b., 35c; lb., \$1.00.

BANANA—Melons very slender and two or three feet long. A very fragrant variety, and if not picked until thoroughly ripe, of very good quality. Its flesh and flavor, as well as its shape, remind one of a great luscious banana.

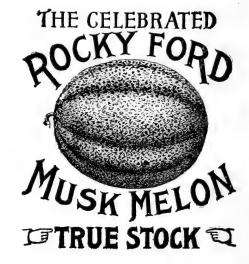
Pkt. 5c; 0z., 25c. Pkt., 5c; oz., 25c.

LARGE YELLOW CANTELOUPE-Although there are bave a distinct type, and find it very popular with all who have tried it. The fruit is large, oblong, slightly ribbed and coarsely netted. The flesh is light yellowish-green, very sweet, crisp and delicious. Pkt., 5c; oz., 25c.

PEACH OR GARDEN LEMON-The fruit is about the size of a large peach, oval shaped and of a bright orange vellow color, somewhat russetted. When it first ripens it yellow color, somewhat russetted. yenow color, somewhat russetted. When it first ripens it is quite hard and has very little flavor, but they soon become mellow, not sweet, and have a rich flavor. For sweet pickles, pies or preserving they are superb. Pkt., 5c; oz., 25c.

BURRELL GEM—Burrell's Gem has a tough, thin rind, well arched ribs, covered with a closely interlaced gray netting; shape elongated, being about 4½ inches in diameter by 6 inches long, flesh of a reddish orange, very thick, fine grained and spicy, seed held firmly in a triangular cavity. This is the secret of a good shipping meion. If the seeds shake loose easily a melon will quickly decay. Pkt., 5c; oz., 15c; ½ lb., 35c; lb., \$1.00.

POLLOCK'S RUST-RESISTANT-Mr. Pollock originated the melon bearing his name by seleting seed from a plant which had not rusted out of a field that the rust had destroyed. This point has been observed in selecting stock seed until the melon, while not being perfectly rustproof, is practically so. The main difference between it and the original, or old style, Rocky Ford is more uniform and on most land runs entirely to standard size crates. Pkt., 10c; oz., 20c; 1/4 lb., 40c; lb., \$1.25.



THE ROCKY FORD MUSK MELON-Is a new and most valuable introduction, and has attained in an incredibly short time a national reputaion. It is of the Netted Gem type, oval in shape, averaging from four and one-half to five inches in length, of a delicious flavor, very fine and smooth grained flesh, of a light green color throughout when ripe. From the district in which it has been for the past several years so extensively grown, Rocky Ford, Colorado, and from which point these melons are shipped in their season by the carload to nearly every station in the United States, till the name Rocky Ford has become a synonym for excellence in cantaloupes. Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., 90c.

Salmon-Fleshed Varieties

EMERALD GEM-This is a new variety of excellent quality; it is of medium size. The skin, white-ribbed, is perfectly smooth and of a deep emerald green color. Ine flesh is thick and of a deep salmon color, and ripens to the green rind. It is peculiarly crystaline in appearance, and so very juicy and rich that it almost drops to pieces when dipped out with a spoon. The flavor is very sweet and luscious. The vines are hardy and very prolific, and the melons mature extremely early. Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., 85c.

OSAGE OR MILLER'S CREAM-The great popularity which this melon has attained is due mainly to its peculiar luscious, spicy flavor and its perfect shipping qualities. The skin is very thin, of a dark green color and slightly netted. The flesh is of a salmon color, remarkably sweet, extremely thick, and delicious to the rind. It is also very productive. It is a remarkable keeper, and will stand shipping. Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., 85c.

PAUL ROSE-A new variety. A successful cross between the Osage and Netted Gem. It combines the sweetness of the former with the fine netting of the Gem and is even a better shipper than that variety. The melons grow uniform in shape and size. The flesh is remarkably thick, making the melons very solid and heavy, and of a beautiful salmon or orange color; deliciously sweet and melting. Pkt., 5c; oz., 15c; 1/4' lb., 30c; lb., 85c.

Our Rocky Ford Canteloupe Seed is from two fields that took the two first premiums at the Colorado State

Gardens!—Please write for prices on large orders.

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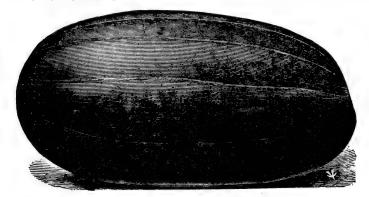
Water Melon

FORDHOOK EARLY—An extra early water melon of large size. Attain an average weight of 30 pounds. The rind is tough, making it desirable for shipping purposes. Flesh is light red and is very sweet. Oz., 10c; ½ lb., 25c; lb., 65c.

KLECKLEY'S SWEETS, OR MONTE CRISTO—We regard this as the finest of all the medium early water melons for home use. The rind is too thin and tender to stand long-distance shipment. The fruits are uniform. Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., 75c.

ICE CREAM, OR PEERLESS—One of the best melons in cultivation. Rind thin, light, mottled green. Flesh bright scarlet; solid to the center; sweet as honey. Large pkt., 5c; oz., 10c; ½ lb., 25c; lb., 65c.

FLORIDA FAVORITE—Oblong in shape, growing to a very large sizee; rind dark, with light green stripes; flesh light crimson, crisp and deliciously sweet. Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 65c.



We consider the Kleckley's Sweet the best watermelon for this vicinity.

HALBERT HONEY—A new, exceedingly sweet and deliciously flavored melon, similar in size and shape to Kleckley's Sweets, but of more regular form and much more productive. It is of handsome, long, oval shape, averaging about 18 inches in length and about 6 inches in diameter. The skin is an attractive, very dark green; the flesh is of a beautiful bright red, extending almost to the outer rind; is very tender and melting, and entirely free from stringiness. The rind, too, is so thin and brittle that it cracks open very easily and will not stand hauling or shipping long distances. For home use and nearby markets it is unequaled in quality; hardy, early, and productive. Pkt., 10c; 0z., 15c; 1/4 lb., 30c; lb., 80c.

CUBAN QUEEN—A very fine variety, growing to a great size; flesh bright red, solid and sweet. The skin is beautifully striped dark and light green. Melons are wonderfully solid, rind thin. They are enormously productive and ripen early. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 65c.

CITRON—For preserving; grows uniformly round and smooth; striped and marbled with light green; flesh white and solid. Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 80c.

Onion Seed

CULTURE—Onions do best on a rich loam, previously cultivated for two years. Stiff clay and light sand are equally unfavorable. The land should be highly fertilized with well-rotted manure, complete fertilizers, etc. Fresh stable manure has a tendency to produce soft onions. Drill in four or five pounds of seed per acre, one-half inch deep. If sets are wanted, use 60 to 80 pounds per acre. Six to ten bushels of sets will plant an acre. Fine marketable size onions (according to variety planted) are easily produced the first year from early spring-sown seed. Culture should be frequent, though shallow. The same ground may be used for onions season after season, if well fertilified annually. Bone meal is an excellent fertilizer. Winter storage demands dryness and protection from sudden changes. Onions should never be handled while frozen.

White Varieties

WHITE GLOBE—A handsome, white, globe-shaped variety; flesh fine, very white, rich and sweet; it is also one of the best keepers of the silver-skinned kinds. Pkt., 5c; oz., 35c; ½ lb., 75c; lb., \$2.50.

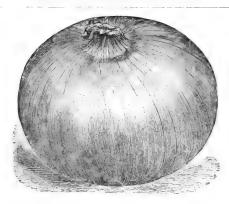
WHITE PORTUGAL, OR AMERICAN SILVERSKIN—Produces early onion of mild flavor; largely used for growing sets and pickles. Large pkt., 5c; oz., 25c; ¼ lb., 65c; lb., \$2.00.

SILVER KING—This is a grand onion. It is a mammoth grower, of beautiful pearly white color, almost transparent in appearance. To match Spanish King at fairs and exhibitions it is just what is needed. Pkt., 5c; oz., 20c; ½/4 lb., 60c; lb., \$2.00.



WHITE QUEEN, OR BARLETTA—Remarkable for its earliness and mild flavor; it is small and white-skinned; the leading variety for pickling purposes. Pkt., 5c; oz., 25c; 1/4 lb., 65c; lb., \$2.00.

BERMUDA ONIONS—These onions grow to an immense size and are of beautiful form. The skin is very thin; flesh white, fine-grained, of mild and pleasant flavor. It will grow an onion from one to one and a half pounds from seed, but to attain full size, set out the bulbs the following spring. Pkt., 5c; oz., 35c; ½ lb., 75c; lb., \$2.25.



Yellow Varieties

YELLOW DANVERS—The leading large yellow kind, round, slightly flattened, flesh fine-grained, rather mild, very rich and sweet; one of the best keepers and shippers, and one of the most productive kinds. Pkt., 5c: oz., 15c; 1/4 lb., 45c; lb., \$1.40.

YELLOW GLOBE DANVERS—This is the standard variety for winter use, producing well-ripened bulbs averaging two inches in diameter and nearly globe shaped. Skin a light golden brown or pale yellow; flesh pure whitee, crisp and mild in flavor. Pkt., 5c; oz., 15c; ½ lb., 45c; lb., \$1.40.

OREGON YELLOW DANVERS—It is a cross between the flat and the globe, on of the best keepers for our western climate. Pkt., 5c; oz., 20c; 1/4 lb., 45c; lb., \$1.40.

AUSTRALIAN BROWN ONIONS—Are of medium size, though growing quite large under favorable conditions. Wonderfully hard and solid, the bulbs are most attractive for market, both as to form and appearance. Pkt., 5c; 0z., 15c; 1/4 lb., 40c; lb., \$1.25.

MAMMOTH PRIZE-TAKER—Genuine seed of this variety produces the handsomest, largest Yellow Globe onion in the list. The yield per acre is larger than that or any other variety. Pkt., 5c; 0z., 20c; 1/4 lb., 50c; lb., \$1.50.

Red Varieties

RED GLOBE—This beautiful strain of Red Globe onion surpasses all others in earliness, productiveness, perfection of shape, uniformity of size, richness of color and long-keeping qualities. Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$1.60.

EXTRA EARLY RED FLAT—Deep red in color; resembles the Red Wethersfield, except that it is much earlier and somewhat smaller; desirable for early market. Pkt., 5c; oz., 20c; ¼ 1b., 50c; 1b., \$1.50.

LARGE RED WETHERSFIELD—The standard red variety. Bulb large and somewhat flattened, oval-shaped; skin deep purple red; flesh purplish white, moderately fine grained and rather strong flavor. Very productive. Oz., 25c; ¼ lb., 60c; lb., \$1.60.

We handle both the Planet Junior and Iron Age Garden Tools. There are none better. See Pages 39 and 40.



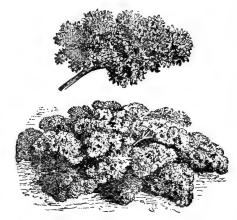
BOTTOM SETS—Are grown from seed that has been sown too thick to attain a large size. The small onions thus obtained are planted out, and are ready in a short time to pull as green onions for the table or bunched for the market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown direct from the seeds.

YELLOW ONION SETS—These will produce handsome, well-ripened bulbs early in the season. By mail, 25c lb. For large quantities, write for prices.

OKRA OR GUMBO

The pods, sliced, are esteemed for soups, stews, etc., and whether used green or dried, must be gathered when young.

WHITE VELVET. HENDERSON'S—Large, round, smooth pods; never ridged; prolific. Pkt., 5c; oz., 10c; $\frac{1}{4}$, lb., 20c.



PARSLEY

Very useful for flavoring soups, meats and for garnishing. The green leaves are used for flavoring, or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

CHAMPION. MOSS CURLED—A compact growing, finely cut and much curled variety of bright green color. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c.

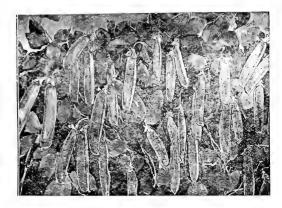
PEANUTS

The peanut thrives and produces best on a light, sandy, fertile soil with a good clay subsoil. It possesses a long tan-root, which extends deep into the earth, drawing thence the nutriment which is beyond the reach of many of our cultivated crops. Per 1b., 35c, postpaid.

Garden Peas

Very scarce and high.

culture—Sow early in the spring in rows, 18 to 24 inches apart. The peas will give quicker returns if covered only 1 inch deep, and where earliness is the most important, they may be treated in that way, but longer pods and more of them will be produced if the seed is planted in trenches 3 to 6 inches deep and covered with



1 or 2 inches of soil. When the plants are 5 or 6 inches high, fill the trench level with the surface. Sow every two weeks for succession. For field culture, they may be sown broadcast and plowed under. Two pounds for 100 feet of drill; 2 or 3 bushels in drills per acre.

Extra Early Peas

ALASKA, OR EARLIEST OF ALL—Earliest and best of all the blue smooth varieties. A smooth, blue pea, which in evenness of growth of vine and early maturity of pods is unequaled by any other extra early pea. Vines two to two and one-half feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, bright green peas of excellent flavor. A great favorite with our market gardeners for fall and early spring planting. Pkt., 5c; 1b., 25c postpaid, express or freight; 1b., 15c; 10 lbs., \$1.25.

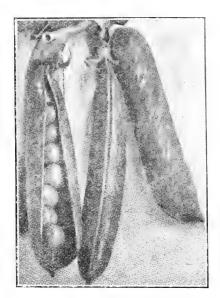
McLEAN'S LITTLE GEM—A sweet, wrinkled pea, coming in a little later than the American Wonder; grows taller and continues in bearing longer. The quality of the pea is very superior. Height, 15 inches. Pkt., 5c; lb., 30c postpaid, express or freight; lb., 20c; 10 lbs., \$1.59.

AMERICAN WONDER—The earliest and best of the wrinkled sorts. A great favorite for family use. Has stout, branching vines, about nine inches high, and covered with well-filled pods, exceedingly sweet, tender and well flavored peas. Drv peas, medium size, much wrinkled and flattened, pale green. Pkt. 5c; lb., 30c postpaid, express or freight; lb., 20c; 10 lbs., \$1.50.

Second Early Sorts

NOTT'S EXCELSIOR—The best early dwarf pea. It combines to a wonderful degree the good qualities of the American Wonder and Preemium Gem peas. The vines are larger and more productive than American Wonder and earlier than Premium Gem. The peas, in sweetness and quality, are unsurpassed. The most desirable sort for the market gardener and unexcelled for the home gardenery hardy. It outyields them 20 to 30 per cent. The pods are one-third longer, and each pod contains from six to nine peas, which are usually fine flavored and tender. Pkt., 5c; lb., 30c postpaid, express or freight; lb., 20c; 10 lbs., \$1.50.

MELTING SUGAR—The kind that has sweet, broad pods, and are used the same way as snap and string beans. This is the most popular of the edible podded varieties. The pods are large, straight, very tender and finely flavored. Vines medium height. Pkt., 5c; oz., 10c; lb., 35c postpaid.



Gradus

GRADUS—This extra early wrinkled pea bears pods of large size, and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; grows vigorous and healthy; vines two and a half feet in height; very prolific. The quality and flavor are delicious, and the peas remain tender and sweet for a long time. Pkt., 5c; lb., 35c postpaid, express or freight; lb., 20c; 10 lbs., \$1.75.

Late Varieties

DWARF TELEPHONE—Produces those handsome long pods. A great favoritee with our market gardeners. Immensely productive, of the finest quality and excellent sugary flavor: vines very strong; the pods are of large size, filled with large, delicious peas. Height two feet. Pkt., 5c; lb., 30c postpaid, express or freight; lb., 20c; 10 lbs., \$1.75.

CHAMPION OF ENGLAND—Very rich and fine flavored; very productive; wrinkled. Height, four to five feet. Pkt., 5c; lb., 30c postpaid, express or freight; lb., 20c; 10 lbs., \$1.50.

STRATAGEM—One of the best of the large, podded peas; the pods are of immense size, filled with large, dark green, wrinkled peas of the finest quality; vine of medium height, but very stocky, with broad, light green leaves, and bearing an abundance of large, handsome pods. Pkt., 5c; lb., 30c postpaid, express or freight; lb., 20c; 10 lbs., \$1.75.

Pumpkin

CULTURE—Sow in good soil in May, when the ground has become warm, in hills eight or ten feet apart each way, or in fields of corn about every fourth hill; plant at the same time with corn; always avoid planting near other vines, as they will hybridize.



Early Sugar

PUMPKINS-Continued

EARLY SUGAR—Fine-grained, sweet and prolific; small in size, but one of the best for pies. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 70c.

KENTUCKY FIELD, OR LARGE CHEESE—A popular variety in the South. Fruit flattened, the diameter being two or three times more than the length. Skin mottled light green and yellow, changing to rich cream color as it matures; flesh tender and of excellent quality. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

BIG TOM—This is one of the largest, most uniform growing and productive varieties known; it has been produced by an annual selection being made for a number of years from the old Golden Marrow by one of the largest canning establishments in Ohio, and who annually grow hundreds of acres especially for canning; they say that they can find no variety equal to it for this purpose. Per oz., 10c; ½ lb., 20c; lb., 50c.



Connecticut Field

CONNECTICUT FIELD—A productive, large, orangecolored field pumpkin, usually grown for stock feeding, but it makes good pies. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 50c.

MAMMOTH PRIZE—The largest pumpkin grown; has attained a weight of 225 pounds. If you wish to see just how large a pumpkin can grow, try the Mammoth Prize. The quality is excellent. Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00.

Parsnips

CULTURE—Parsnips do the best in rich, deep soil, but will make good roots on any soil which is deep and mellow and moderately rich. As the

seed is sometimes slow to germinate it should be sown as early as possible. Cover one-half inch deep and press the soil firmly over the seed. Give frequent cultivation and thin the plants six or eight to the foot. One Jounce will sow 150 feet of drill; five pounds, one acre.

IMPROVED GUERNSEY (Improved Half-Long)—A greatly improved and wonderfully fine strain of Guernsey parsnip. The roots do not grow so long as the Hollow Crown, but are of greater diameter and more easily gathered. It is a very heavy cropper. The roots are very smooth, the fesh is fine grained and of most excellent quality. Pkt., 5c; oz., 10c; ½ lb., \$1.00.

T.OMG SMOOTH, OR HOLLOW CROWN (Abbott's Improved Long Sugar, or Long White Dutch Parsnip)

—A great cropper; tender, sugary, and considered the best for general cultivation. Parsnips are improved by remaining exposed to the frost. Pkt. 5c; oz., 10c; ½ lb., 35c; lb.,

Peppers



Pepper

Sow the seeds early in hotbeds or later, when the weather becomes warm, in open beds; when two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart at one foot apart in the row. Guano and hen manure are excellent fertilizers, and will greatly increase the yield.

RUBY KING—An improved American sort, reaching the largest size, yet retaining the symmetrical shape of the smaller sorts. It is very bright colored, beautiful, sweet and mild flavored. Pkt., 5c; oz., 30c; 1/4 lb., 75c.

LARGE BELL, OR BULL NOSE—A large, mild, thick-fleshed variety. One of the best for stuffed pickles. Pkt., 5c; oz., 30c; ¼ lb., 75c.

LONG RED CAYENNE—Brilliant coral-red pods, three or four inches long, and a prolific bearer; very pungent and used very largely with pickles when green. Pkt., 5c; oz., 25c; 1/4 lb., 75c.

RED CHILI—Small, bright red peppers, very hot and pungent, and generally used for making "pepper sauce"; very prolific. Pkt., 5c; oz., 25c; 1/4 lb., 75c.

RHUBARB OR PIEPLANT

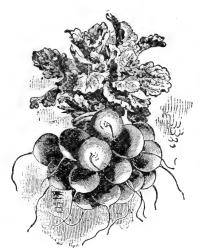


CLUTURE - Rhubarb succeeds best in deep, rich, somewhat retentive soil. The richer its condition and the deeper it is stirred, the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall transplant the young plants into very highly manured and deeply surred soil, setting them four to six feet apart each way, and give a dressing of coarse manure each spring. The stalks should not be plucked until the second year, and the plant never allowed to exhaust itself by running to seed.

VICTORIA, OR MAMMOTH— Very large; finest cooking variety. Pkt., 5c; oz., 15c; ½ lb., 45c; lb., \$1.40.

Radishes

CULTURE—Radishes must make a rapid growth to be crisp and tender. For early use seed should be sown in the hotbed, in drills four or five inches apart and half an inch deep. For an early crop in the open ground select a sandy soil and a warm south border under the shelter of a fence or building, if possible. A load of fresh, sandy loam from the woods is better for the radish crop. As soon as the first leaves appear sprinkle with soet or ashes to save from the little furnip fly. One ounce will sow 150 feet of row.



SCARLET TURNIP WHITE-TIPPED RADISH.

THE SECRET IN GROWING GOOD RADISHES consists chiefly in the observance on the part of the grower of three points. First, they should be grown on quick, light soil. Second, they should be given plenty of water; and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly, and if not supplied with plenty of water are apt to be pithy.

Early Round Varieties

EARLY SCARLET TURNIP, WHITE TIPPED—American grown. The favorite variety for outdoor cultivation; medium size, uniform shape; color bright scarlet, sharply contrasted with white tip, which makes it most attractive. It grows quickly; flesh white, crisp and of the best quality. Pkt., 5c; oz., 10c; 2 oz., 15c; ½ lb., 20c; lb., 60c.

EARLY SCARLET TURNIP, WHITE TIP—French grown. This is similar to the American grown, but owing to the selection of only the best roots for seed stock, this seed produces more perfect bulbs. Pkt., 10c; oz., 15c; ½, 1b., 30c; lb., 75c.

EARLY ROUND DEEP SCARLET—Similar in form to the Scarlet Turnip-Rooted, but much darker in color; flesh white, very crisp and tender; top small, well adapted for growing in frames. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.

EARLY CRIMSON GIANT—The largest early Scarlet Turnip-Shaped Radish. A new early radish, double the size of any of the other early turnip-shaped type, but notwithstanding its immense size, does not get hollow and pithy. The flesh is a sparkling white, solid, crisp and juicy, and of the mildest flavor. The shape of the bulbs vary from round to almost oval, but the bright, deep crimson color of the skin remains quite constant. Excellent for both forcing and open ground. Pkt., 5c; oz., 10c; ½4 lb., 25c; lb., 75c.

OLIVE SHAPED

FRENCH BREAKFAST, OR HALF-LONG WHITE TIPPED—Medium size, of quick growth, crisp and tender; terminates more abruptly than the Half-Long Scarlet, lower end and tap root white. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.

Long Varieties

EARLY LONG SCARLET—The leading variety either for the family or market garden. From six to eight inches long, standing nearly half above the ground: bright scarlet, smooth, crisp, tender and mild. Pkt., 5c; oz., 10c; 2 oz., 15c; ½ lb., 20c; lb., \$60c.

IMPROVED CHARTIER—Roots long, tapering ratner abruptly and attaining a very large size. Of rapid growth, it is soon ready for the table, remaining crisp and tender until fully grown. Color, scarlet above, shading into white at the tip. Flesh white and mild flavored. Pkt., 5c; oz., 10c; 2 oz., 15c; ½ lb., 20c; lb., 60c.

NEW WHITE ICI-CLE - Entirely distinct, long, stender, white. verv early; much the earliest and finest long white. It is ready for use fully as early as Long Scarlet; short top, with less foliage, rendering it more desirable for forcing. the open ground roots continue brittle, crisp and mild, until they are fully as large as those of the Long Brighton Scarlet. It is ready for use follow-ing the olive-shaped Earliest White, and destined to become a leading variety. In recent years strains of White Wood's Frame and Chartiers have been introduced and found of poor quality, but the Icicle is, per-haps, superior to the finest red ones. Roots pure, snowy white,



finest red ones. Roots pure, snowy white, four inches in length and half an inch in diameter; they retain their crispness and fresh, mild flavor until fully six inches long and an inch in diameter. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

LONG WHITE VIENNA, OR LADY FINGER—The best long white radish grown; pure white, long, tender and sweet; a favorite also for its beauty of form and rapid growth. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.

Winter Varieties

LONG BLACK SPANISH—Very hardy and good for winter use. If stored in sand will keep good all winter. The roots, which present a rusty, black appearance, are large, firm and not liable to become pithy. Pkt., 5c; oz., 10c; 1/4 lb. 20c: lb., 65c.

MAMMOTH CALIFORNIA, OR WHITE CHINA—Extensively grown by the Chinese, who introduced it into California. Very large and cylindrical, terminating abruptly with little tap root; mild and tender, and keeps well all winter. The skin and flesh are of a transparent white. Pkt., 5c; oz., 10c; 2 oz., 15c; ½ b., 25c; lb., 65c.

CHINA ROSE—One of the best fall and winter varieties. Half-long shape; upper part bright crimson, shading to white. Flesh white, firm, tender and of superior quality. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 65c.

SPINACH



CULTURE—It is one of the most easily managed of all vegetables, requiring but little culture. The main crop is sown in September, and it is sometimes covered with straw in exposed places during winter, which prevents it from being cut with frost.

For summer use it may be sown at intervals of two or three weeks from March to August. Spinach is best developed, most tender and succulent when grown in rich soil. One ounce to 100 feet of drill; 10 to 12 pounds to an acre. BLOOMSDALE—A very erly variety. Is hardy and may be planted for early spring use. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 40c.

LONG STANDING—An improved variety, slow going to seed, and perhaps the best for general use. Pkt., 5c; 02, 10c; ½ lb., 20c; lb., 40c.

IMPROVED THICK LEAVED—A variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color and quality when cooked. Best for market gardeners. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 40c.

SALSIFY OR VEGETABLE OYSTER



The long, white, tapering root of Salsify resembles a small parsnip, and when cooked is a good substitute for oysters, having a very similar flavor.

CULTURE—It succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnips. The roots are perfectly hardy, and may remain out all winter, but should be dug early in the spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in a pit or in a cellar in damp earth or sand.

MAMMOTH SANDWICH ISLAND—This is in every way superior to the old sort, being larger, stronger growing and less liable to branch. Pkt., 5c; oz., 15c; ½ lb., 40c; lb., \$1.35.

Squash

Summer Varieties

CULTURE—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but squash is less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight to ten. Three plants are sufficient to a hill. In gathering the winter sorts care should be taken not to bruise or break the stem from the squash, as the slightest injury will increase the liability to decay.

MAMMOTH SUMMER CROOK-NECK—An early, prolific kind, having a solid curved neck; rne skin is yellow, thin, hard and very warty; flesh tender and or good quality. Twice as large as the ordinary Crookneck and several days earlier. Pkt. 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

EARLY YELLOW MAMMOTH BUSH SCALLOP—An early, flat, scallop-shaped variety: color yellow; flesh pale yellow and well



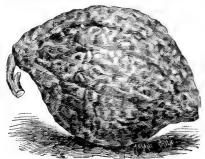
Summer Crookneck

flavored; very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

MAMMOTH WHITE BUSH SCALLOP—The best summer sort for the market; very productive and of good size. Pkt., 5c; oz., 10c; ½, 1b., 25c; lb., 75c.

ENGLISH VEGETABLE MARROW—A favorite English variety, bearing freely oblong, dull yellow fruits 10 to 15 inches in length by 4 to 5 inches in diameter; flesh before ripe, tender, marrowy and delicious. Oz., 10c; 1/4 lb., 25c; lb., 85c.

Autumn and Winter Varieties



WARTY HUBBARD

GOLDEN HUBBARD—This is a very distinct sort of the shape and general character of the Hubbard, but a little smaller; earlier to mature, and of a rich, orange-red color, instead of the dark olive-green of the old Hubbard, while the flesh is a little deeper colored and fully as good quality. Pkt., 5c; oz., 15c; ½ lb., 35c; lb., \$1.00.

CHICAGO WARTED HUBBARD—Is similar in size and quality to the Hubbard. The vines are vigorous and productive, while the large, dark olive-green fruits are rather more heavily warted. Very handsome in appearance; an excellent keeper and of splendid quality. Pkt., 5c; 02., 15c; 1/4 lb., 35c; lb., \$1.00.

NEW DELICIOUS—This new fall and winter squash resembles the old Hubbard; average weight is between five and ten pounds. Seed cavity small; flesh exceedingly thick, compact, fine grained; color, golden orange. The flesh is meaty, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies. Pkt., 10c; 0z., 15c; ½ lb., 40c; 1 lb., \$1.25.

BOSTON MARROW—A good keeper, of excellent flavor; flesh orange colored and fine grained. Pkt., 5c; oz., 10c; 1/4 1b., 35c; 1b., \$1.00.

MAMMOTH CHILI—The largest variety grown, having attained a weight of over 200 lbs.; round, flattened at the ends; rind deep orange; flesh deep yellow, thick and very nutritious; sometimes used for the table, but more desirable for stock feeding. Pkt., 5c; oz., 15c; ½ lb., 35c; lb., S5c.

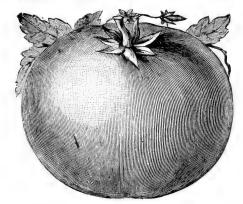
Tomatoes

CULTURE—Sow the seed in March and April in the hotbed or in spots in a sunny exposure in the house. If it is desired to make very healthy stock plants, they may be transplanted or repotted when about two or three inches high. When five or six inches high, if the ground has become warm, transplant to the open ground, on a rainy or cloudy day, if possible: if not, the young plants should be liberally watered and shaded from the hot sun. If it is desirable to have the fruit ripen as early as possible, in preference to a heavy crop, select rather 11/ht, poor soil, and a sunny location. Trimming off the laterals, training to a stake, and propagating by slips are believed by many to promote earliness. Set the plants four feet apart each way, upon mounds of earth, to allow the foliage to open and let the sun in amongst the fruit. A cheap trellis, made by driving three stakes around the plants and encircling them with three or four barrel hoops, makes a very nice support for training them on.

SPARK'S EARLIANA—The earliest large and smooth tomato. The most perfect of all tomatoes. Of large, uniform size and beautiful red color. Quality almost beyond praise. A most vigorous grower and heavy bearer, continuing until frost. Succeeds everywhere and especially recommended for this section. The above claims may seem strong, but they have been abundantly proved by thousands of planters who have grown this grand tomato since

TOMATOES—Continued

its introduction three years ago. Spark's Earliana is as near seedless as any tomato, giving but 12 to 15 pounds of seed to the acre, while other varieties yield from 75 to 100 pounds to the acre. For this reason the genuine seed can never be sold at a low price. Pkt., 5c; oz., 30c; ½, 1b., 80c; 1b., \$2.50.



LINGSTON'S CORELESS—A new bright red tomato of the globe-shaped type, almost round, being about the same diameter each way, making it a most profitable variety for canning. It is a strong grower and a heavy cropper, a grand slicing variety and ripens all over and through. Entirely free from hard green core. Pkt., 10c; 0z., 50c.

DWARF CHAMPION, OR TREE TOMATO—The plant is dwarf and compact; fruit medium size, rich, glossy red, smooth and solid; fine for private gardens. Pkt., 5c; oz., 25c; ½ lb., 75c; lb., \$2.50.

ESSEX EARLY HYBRID—Very similar to the Acme; fruit dark purple; always smooth and handsome; in quality it is classed with the best; will give satisfaction wherever the Acme does. Pkt., 5c; oz., 25c; 1/4 lb., 75c.

NEW TOMATO—CHALK'S EARLY JEWEL—The large, handsome fruits are very solid and deep through, being almost round or ball shaped; will measure nearly three and a half inches across by nearly three inches in depth, from stem to blossom end. Color, brightest scarlet, ripening right up to the stem without any cracks or green core. The foliage is rather sparse and open, admitting the sunlight to the center of each plant, so that all the fruits are thoroughly ripened, but the leaves are dark green and not inclined to curl, as in most other first early varieties. Pkt., 5c; oz., 35c; ½ lb., \$1.00.

ATLANTIC PRIZE (Extra Early)—A distinctly early variety, of good size and smooth surface. Many of the objections to the usual early kinds, such as undersize, deep corrugations and rough skin, are overcome in the Atlantic Prize. Pkt., 5c; oz., 25c; ½ 1b., 70c.

NEW STONE—Fine for main crop; very large; color bright scarlet; very smooth, ripening up to the stem without a crack; exceedingly solid and firm fleshed; an excellent shipper; quality the very best; not subject to rot. Superior for canning. Pkt., 5c; oz., 25c; ½ lb., 75c.

PEACH—This is a distinct and very attractive tomato for preserving, eating from the hand or table. Fruit resembles a peach in shape, size and color, and is covered with a delicate bloom, which makes the resemblance more striking; flesh tender and of good flavor. Pkt., 5c; oz., 25c.

GROUND CHERRY, OR HUSK—Plants of low, spreading growth and immensely productive. The small yellow fruits are each enclosed in a husk or covering. When ripe the fruits are an inch in diameter, bright yellow and of very sweet flavor; highly esteemed for preserving or making pies. Pkt., 5c; oz., 25c.

YELLOW PEAR-SHAPED—A small-fruited variety, which is golden-yellow. It is very useful for salads when the fruit is simply cut in two lengthwise. Pkt., 5c; oz., 25c.

Turnips

For feeding stock in fall and winter there is nothing superior to turnips and rutabagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We cannot too earnestly recommend farmers to increase their sowings largey, for we are sure the crop will prove remunerative.

CULTURE—For early, sow as soon as the ground can be worked, in drills 15 to 18 inches apart, and half an inch deep. Thin to six inches in the row. Turnips will grow on any soil that is moderate rich. An essential point is to make them grow quickly, otherwise they are apt to be tough and woody. They do best in light, loamy soil, that which has been manured for a previous crop is preferable to manuring with stable manure at time of sowing, as in this case they are liable to be worm eaten, hence unsalable. Two pounds will plant an acre.

EARLY PURPLE TOP, STRAPPED LEAVED—One of the best and most universaly grown; small, erect top, round, flat; purplish red above; white underneath; flesh firm, but very tender and sweet; it is soon ready for the table and keeps well. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.



EARLY FLAT WHITE DUTCH, STRAPPED LEAVED—A leading white-fleshed variety, and one of the best, either for family, market garden or field crop; it is of medium size and produces a large crop. The flesh is firm but tender, and of a superior rich, buttery flavor. A good keeper. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

WHITE EGG—A quick growing egg-shaped, perfectly smooth, pure white variety, with small top and rough leaves. It grows half out of the ground; the flesh is very sweet, firm and mild, never having the rank, strong taste of some of the early varieties. Pkt., 5c; oz., 10c; 2 oz., 15c; ½ lb., 25c; lb., 65c.

EARLY SNOWBALL—A perfectly globe shaped, white skinned turnip. It is exceedingly productive. The flesh is fine grained, firm and of very delicate flavor. It is one of the best keeping of the white fleshed sorts. Very early and particularly adapted for family and market use. We recommend it to market gardeners because its earliness and fine appearance make it a very profitable variety of turnip. Pkt., 5c; oz., 10c; ½ 1b., 25c; lb., 65c.

POMERANIAN WHITE GLOBE, STRAPPED LEAVED—This is a free growing, rough leaved sort, useful for both table and stock. It is not quite so rapid in growth as the flat varieties, may be expected to come in as a succession, in autumn and is admirable for table use in early winter. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

YELLOW ABERDEEN—Round, medium size, light yellow; stained with purple on top; produces a large crop; is hardy and keeps well; flesh very firm but tender and sweet. Pkt., 5c; oz., 10c; 2 oz., 15c; ½, lb., 20c; lb., 60c.

PURPLE TOP WHITE GLOBE—A variety of the Purple-Top Flat Turnip, from which it originated. It is globular in form, of beautiful appearance and of most excellent quality. Equally desirable for table or stock. It keeps well and is a fine market sort. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

TURNIPS-Continued

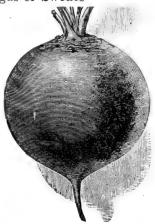
COWHORN—Sometimes called Long White. Is slightly crooked, pure white, except a little shade of green at the top. Grows half out of the ground and is of very rapid growth; is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in the West, and is an immense yielder. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

Ruta Bagas or Swedes

YELLOW SWEDE, OR RUTABAGA—Shape oblong, dull reddish color above ground, but yellow underneath; is harder than the common turnip and will keep till spring. Pkt., 5c; 0z., 10c; 1/4 lb., 20c; lb., 60c.

SWEET RUSSIAN.

OR WHITE—The only white-fleshed rutabaga in general cultivation: is hardy, easily grown, large and yields as the best yellow kinds: flesh fine-grained and solid. but tender and well flavored; good for stock and desirable for the table. Pkt., 5c; oz., 10c; 2 oz., 15c; ½ lb., 20c; lb., 60c.



TOBACCO

CONNECTICUT SEED LEAF—A largely cultivated sort in America. Large pkt., 5c.

HAVANA-A genuine Cuban strain. Pkt., 5c.

HERBS

ANISE—Used for cordials, garnishing and flavoring. Pkt., 5c; oz., 10c.

BALM—Leaves used for making pleasant beverages. Pkt., 5c; oz., 25c.

BASIL—Sweet; the leaves are used in flavoring soups, etc. Pkt., 5c; oz., 15c.

CARAWAY—Grown for seeds; used for flavoring. Pkt., 5c; oz., 15c.

CATNIP, OR CATMINT—Leaves and young shoots for seasoning. Pkt., 5c; oz., 35c.

<code>DILL</code>—Seeds have an aromatic odor and pungent taste. Pkt., 5c; oz., 10c; ${}^{1}\!\!/_{\!4}$ lb., 25c.

FENNEL—Sweet; ornamental; when boiled, used in fish sauce. Pkt., 5c.

CORIANDER—Seeds used in the manufacture of liquors, in confectionery and culinary preparations. Pkt., 5c; oz., 10c; 1/4 lb., 25c.

 ${\bf HOREHOUND}{\bf —}{\rm For\ seasoning\ and\ cough\ remedy.}$ ${\bf \cdot Pkt.,\ 5c;\ oz.,\ 20c.}$

LAVENDER—An aromatic, medicinal herb. Pkt., 5c; oz., 20c.

MARJORAM—Sweet; leaves and shoots for seasoning. Pkt., 5c; oz., 15c.

SUMMER SAVORY—Used for flavoring soups. Pkt., 5c; oz., 10c.

THYME—Leaves and young shoots used for seasoning; a tea is made from leaves, a remedy for headache. Pkt., 5c; oz., 30c.

TREE SELDS

Single Pound Prices are by Mail, Postpaid.

PEACH PITS—For nursery stock. Lb., 20c; 100 lbs., \$3.50.

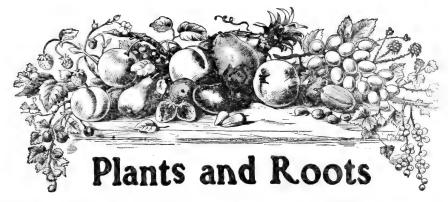
APPLE SEED—0z., 10c; ½ lb., 40c; lb., \$1.10. CHERRY PITS (Mahaleb)—0z., 10c; ½ lb., 25c; lb., 85c.

PEAR SEED (Pyrus Communis)—The best imported for nursery stocks. Oz., 15c; 1/4 lb., 45c; lb., \$1.50.

QUINCE SEED—Oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$2.00. LOCUST, HONEY—Oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

The Inland Seed Co.'s Seeds grow We test them all, and if we do not find sufficient vitality, they are destroyed.

The new Postal Law now in effect, allows us to send up to eleven pounds of seed at the rate of two ounces for one cent. It also enables us to send many articles we list as per prices given on the first leaf of this catalog. You will be obliged to figure out your postage as per the zones given. Any postage to your credit will be returned at once.



VEGETABLE PLANTS AND ROOTS

We grow large quantities of vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We have made arrangements this year so we can supply all vegetable plants in two grades -plants direct from the seed beds and those that have been transplanted into shallow boxes.

TRANSPLANTED PLANTS are much stronger and better rooted and are well worth the price, especially in the early part of the season. We can supply most of the lead-

ASPARAGUS ROOTS-	Postpaid	Evr	ress
Þ.	Doz.	100	1000
1 year old		\$0.75	
2 year old		1.00	7.00
		1.00	*.00
CABBAGE PLANTS-		For	ress
	Doz.	100	1000
Early Jersey Wakefield, tran	ns-	200	
planted		\$0.75	\$5.00
Early Jersey Wakefield, not tran		5	
planted		.50	3.50
Danish Ballhead		.50	3.00
Cauliflower. Snowball		1.00	5.00
, ,		2100	0.00
CELERY-		04.00	80.00
Early White Plume, transplanted		\$1.00	\$6.00
Early White Plume, Seeding		.75	4.50
Golden Self-Blanching, transplant		1.00	6.00
Golden Self-Blanching Seedling		.75	4.50
Late varieties, Seedlings	15	.75	4.00
PEPPERS— Ruby King or Bull Nose	25	.75	5 00
			0.00
TOMATOES-			
Earliana, transplanted		1.00	7.00
Dwarf Champion, transplanted		1.00	7.00
Dwarf Champion, not transplante	d20	.50	3.00
EGG PLANT	25	1.00	
TOBACCO	30	1.00	
CHIVESBun	ch .10	.75	
PARSLEY	20	.75	
SAGE	30	1.00	
HOP ROOTS		2.00	
MINT ROOTS		2.00	
HORSE HADISH SETS		1.00	
		2.00	
RHUBARB RO	OTS		

KHUBAKB KOOTS

	It is	too	exp	ensiv	e to	send	only	the	very	smallest	roots	
by	mail	, 80	we	list	same	ony	by	expre	ess or	freight:		
								- :	Each.	Doz.	100	
1	year	od.							60.10	\$0.75	\$3.50	
2	vear	old.							.15	1.00	6.00	

STRAWBERRY PLANTS

HOOD RIVER—The leading standard shipping variety. The berry that has made the town of its name famous, and its growers financially rich. Dark red color, uniform size, good quality, but not heavy in yield. A specialty berry for the grower whose market is somewhat distant.

GLEN MARY-A bright, handsome, prolific, standard sort, grown the country over and perfectly reliable. Some large growers claim for this the par excellence in strawberries.

SENATOR DUNLAP—Its color is a rich dark red, with glossy finish. It has become a very popular variety, perhaps on account of its uniformity.

WARFIELD—The most popular pistillate variety grown. It is a large, beautiful, cone-shaped berry with a fadeless, dark red exterior; the deep red color is extended clear to the center of the fruit. Exceptionally fine for canning and attractive in the box. Any variety that we offer will fertilize it except Gandy, Aroma and Marie.

MAGOON-Of first quality, great productiveness, attractive shape and color; good for canning.

WM. BELT—Nothing better for quality, shape and attractiveness. A reliable and trustworthy variety; ripens evenly; prolific and will meet the expectations of the most fastidious.

GANDY—A variety that has not yet today found its equal as a truly reliable and all-round late producing berry. For 20 years since its introduction it has remained at ror 20 years since its introduction it has remained at the head of the list in its seasons, although many varieties have been introduced claiming superiority, and while some of them may equal, the majority are found to be wanting. The plant is a rampant grower, having strong fruit stems, holding the heavy weight of the fruit erect; slow in forming and thereby ripening its fruit and in the height of its glory when the early and midseason varieties are about done fruiting.

AROMA-A late variety and among the best of the late AROMA—A late variety and among the best of the late ripening varieties. In comparison with the Gandy, it will be found that it commences to ripen a little earlier and will continue to the end of Gandy's season and is similar to it in size and productiveness. It is planted extensively both North and South. Quality the best of any, comes nearer being the true strawberry flavor than all others. It is the best for eating from the vines, with cream, shortcake, preserved or canned. Its shipping qualities are of the best.

PRICES

	Express		
Postpaid, D	oz.	100	1000
MAGOON (S), medium early\$0	.30	\$0.85	\$5.00
HOOD RIVER (S), early	.30	.85	5.00
GLEN MARY (S), medium early	.30	.85	5.00
WM. BELT (S), medium early	.30	.85	5.00
GANDY (S), very late	.30	.85	5.00
AROMA (S), late	.35	1.00	6.00
WARFIELD (P), medium early	.35	1.00	6.00
SENATOR DUNLAP (S), med. early	.30	.85	5.00
We also handle Pansy, Aster and other	Flov	ver Plan	ıts.

For Cultural Directions of Hot Beds and Frames, see Page 74.

FLOWER SEEDS

Practical Directions for Culture, Treatment, Etc.

ANNUALS (A) -Sow in April or May, according to the latitude, in shallow boxes or pots placed in a warm window, a hotbed, or, if possible, in a greenhouse. A second sowing ought to be made from two to four weeks after for a succession, as well as to provide against failure the first time. For sowing seeds in there is nothing better than shallow boxes from 2 to 3 inches deep, and of any convenient size. The most suitable soil for all the smaller kinds is a very fine, rich, sandy loam. That from old hotbeds is excellent, or sods from an old pasture piled up and allowed to rot for two or three years and then mixed with a little old stable manure and sand. After the seeds are up, care must be taken to give them plenty of air and moisture, yet not too much water, or tney will "damp off." When the young plants are well out of the seed-leaf, they must be transplanted to new boxes. If pots 2 inches or more in diameter can be had, set out from three to a dozen or more of the young seedlings along the edges of the pot, so that as soon as the ground is warm enough they may be easily turned out and planted singly, as by that time they will have made good roots. When pots cannot be had, boxes, tin cans, etc., may be

A common mistake in sowing flower, as well as other seeds, is covering too deeply. As a general rule, cover only to the depth of the thickness of the seeds; or, with medium-sized seeds, like Balsams, Zinnias, etc., half an inch or so is none too much. Such fine seeds as Portulacas need only be pressed into the soil with a piece of board or the palm of the hand. Always press the earth down firmly after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the son. Seeds of the hardier Annuals may be sown where they are to grow; but, as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently. Provide some support for all such Annuals as require it.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

Seeds of Biennials and some Hardy Annuals may be sown in July and August in the open and in September in boxes and placed in coldframes. They will make strong plants by spring and flower early. Do not put on the sashes until heavy rains and frosts begin, and then always remove during the day whenever the temperature is above freezing in winter.

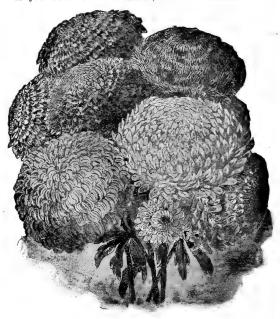
BIENNIALS (B) and PERENNIALS (P)—These require the same treatment as the Annuals. In addition to the above, both Hardy Biennials and Perennials may be sown in the open border from July to September; for, if not sown until spring, the seeds of many Perennials require several months, and some even as long as two years before they germinate. In this case, it is a good plan, at the commencement of frost, to cover them lightly with straw, leaves or any dry litter, in order to afford some protection from the extreme severity of the winter. As soon as the frost is out in the spring, remove the covering and loosen the surface around the plants, which when large enough may be transplanted to the flower-garden where they are to remain. The seeds of some species of Hardy Perennials often lie in the ground for six or eight months before germinating, so that patience with them is often unexpectedly rewarded.

ARABIS, OR ROCK CRESS (P)—The earliest, prettiest, spring flower. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequaled for rockeries or edgings; withstands the drought and is always neat. Pkt., 10c; 1/4 oz., 30c.

AGERATUM (A)—A plant that blossoms continuously all summer in the garden and makes a pleasing contrast of color with more brilliant varieties. Pkt., 5c; 1/2 oz., 15c.

ALYSSUM (SWEET) (A)—A very pretty plant for beds, vases, baskets, edgings or rock work. Sweet scented and blooms profusely all summer. Pkt., 5c; oz., 25c.

If you want some fine Asters, order Hohenzollern.



ASTERS

GIANT COMET, OR OSTRICH PLUME (A)—Are thrifty growers, 15 inches high, bearing immense long-stemmed flowers, composed of long, wavy petals, like Japanese Chrysanthemums.

		1/				
Light Blue,	2 ft.		0Z.,	40c;	pkt.,	10c
All Colors I	Mixed		0z.,	40c;	pkt.,	5c

NEW "CREGO GIANT" ASTER (A)—The "Giant" Crego" is distinct in every way, and its magnificent flowers, often 6 inches in diameter, are fully equal to Chrysanthemums. They have rare beauty of form and brilliant coloring, are very vigorous, and free flowering; blooms are borne on long stems.

White	 0Z.,	50c;	pkt.,	15c
Pink	 0Z.,	50c;	pkt.,	15c
Rose	 0Z.,	50c;	pkt	15c

ASTER (CHINESE SINGLE) (P)—These are exceedingly showy and excellent in cutting for vase decorations. The large, brilliant, daisy-like flowers with yellow centers are produced in profusion. Hardy perennial. Finest Mixed, 2 ft., $\frac{1}{4}$ oz., $\frac{40}{6}$ c; pkt., 5c.

For Cultural Directions of House Plants, see Page 74.



Hohenzollern Aster

HOHENZOLLERN ASTER (A)—The finest type of the Giant Comet, or Ostrich Feather type of Asters. Much larger than the Giant Comet, the petals longer and more curled and twisted, and produced in greater abundance. Borne on long stems, which makes them cut flowers par excellence. We have them in separate colors.

White		0Z.,	40c;	pkt.,	100
Light Blue		0Z.,	40c;	pkt.,	100
Dark Blue		0Z.,	40c;	pkt.,	100
Pink		0z.,	40c;	pkt.,	100
Rose	¹ / ₈	οz.,	40c;	pkt.,	100
Lavender		0z.,	40c;	pkt.,	100
All Colors Mixed		0Z.,	40c;	pkt.,	10c

BALSAM (A)—Unrivaled for the great variety of color and size of flower; includes all of the most desirable shades and colors; no finer mixture can be obtained. Pkt., 10c.

BACHELOR'S BUTTON, OR CENTAUREA CYANUS (A)—A hardy annual, easily cultivated. Has recently been greatly improved, and now produces handsome flowers of a great variety of rich colors. Borne on tall, branching stems, with but little foliage. Striking and handsome. Pkt., 5c; oz., 25c.

BALLOON VINE (LOVE-IN-A-PUFF) (A)—A rapid growing annual climber; succeeds best in light soil and warm situation; flowers white; seed vessels look like miniature balloons. Pkt., 5c.

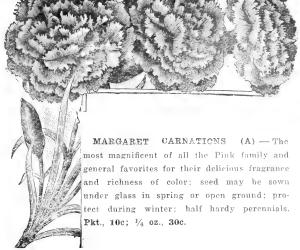
BEGONIAS (P)—Begonias are among the most beautiful of flowering plants, especially adapted to pot culture. Mixed, pkt., 20c.

CANARY BIRD VINE (P)—A beautiful climber; flowers a bright golden yellow, bearing a fanciful resemblance to birds with expanded wings. Pkt., 5c; ½ 02., 15c.

CANDYTUFT (A) —Mixed, many fine shades. Pkt., 5c; oz., 20c.

CANNA (FRENCH MIXED) (P)—Ornamental, tropicallooking plants of easy culture; large and beautiful flowers. Hardy perennial. Pkt., 10c; oz., 35c. For Canna Bulbs, see Plant Department.

CALENDULA (POT MARIGOLD) (A)—Very hardy annual, one foot high, blooming freely practically the whole year round. Is of the easiest culture and is desirable for rather inferior soils, where less sturdy flowers do not thrive. A medicinal extract resembling arnica is made from the flowers. Pkt., 5c; oz., 20c.



CALLIOPSIS (A)—A quick growing annual. The flowers are placed on graceful wavy stems and in color run through all the shades of red and yellow; foliage dainty: useful combined with other flowers. Pkt., 5c; ½ 0z., 20c.

CENTAUREA IMPERALIS (ROYAL SWEET SULTAN) (A)—The finest of all Sweet Sutlans; the plants are very strong and bear giant flowers on stiff, long stems; excellent for cutting and lasting, when cut, unusually well. Mixed, pkt., 10c; ½ oz., 50c.

COREOPSIS (LANCEOLATA) (P)—A perennial, blooming the first year; flowers rich yellow, single; very fine for cutting. Pkt., 10c; ½ oz., 40c.

COSMOS



COSMOS (A)—A strong grower, having clegant foliage, and for tall blooming has no superior. Seed grown in March or April and transplanted to open ground will produce plants three to five feet high by September, which thereafter, until November, will yield hundreds of blossoms three inches across; various shades. Pkt., 5c.

CHRYSANTHEMUM (A)—The Annual Chrysanthemums are rapidly coming to the front, both as greenhouse and garden plants; they should not, however, be confounded with the Japanese perennial kinds that are being so widely introduced; the annuals have recently been greatly improved. Pkt., 5c and 10c.

COLUMBINE, OR AQUILEGA (P)—A delightful hardy perennial, growing about two feet high, and splendid for permanent beds and borders. Thrives in partial shade and under the spray of a fountain, or other moist location. Bears exquisite blossoms of clear blue, white, rose, yellow, pur's and striped. Single mixed, pkt., 5c; oz., 25c. Double mixed, pkt., 10c; oz., 35c.

CELOSIA (COXCOMB) (A)—Free blooming annuals, growing best in light soil not too rich. They make splendid border plants and are attractive for pots. Mixed. Pkt., 10c.

CLARKIA (A)—Handsome, free flowering annuals of easy cultivation. Produce a fine effect massed in beds. Flowers are very bright and attractive. Double mixed. Pkt., 5c.

COBAE SCANDENS (A)—One of the handsomest and most rapid growing of the annual climbers. It climbs thirty feet in a season. The flowers are bell shape and of a purplish lilac color. Very prolific and perfectly hardy. The vine is always clean of insects. Mixed. Pkt., 10c; $\frac{1}{2}$ oz., 20c.



CAMPANULA, OR CANTERBURY
BELLS (P) — Very ornamental garden plants of the easiest culture; hardy biennial, two and a half feet high, producing large, nodding and charming bell-shaped flowers of many exquisite shades. Pkt., 5c; 1/4 oz., 50c.

CYPRESS VINE, OR IPOMOEA QUAMOCLIT (A)—A climber of rapid growth, having handsome, fernlike foliage and a profusion of bright, attractive flowers. Mixed. Pkt., 5c; ½ 0z., 15c.

DAHLIA (P)—But few people know Dahlas can be raised from seed and will bloom the first year. The seeds germinate as easily and certainly as Zinnias, and from the very first development are strong, and sturdy little plants. Plant them in a shallow box or pan early in March or April, transplant them carefully as their growth demands, and keep the soil moderately moist. When all danger from frost is over, plant them in the bed or border in the garden, and from then on they will prove no more trouble than if the tubers had been used instead of seed. Double Mixed, pkt. 10c Single Mixed, pkt. 10c Cactus Dahlia, Mixed, pkt. 10c

SHASTA DAISY (P)—A most remarkable new flower, originated by Lather Burbank, of California; bears flowers of the snowiest white, with yellow centers; blooms the first season and should be sown in boxes early and transplanted. Pkt., 15c.

DIANTHUS (CHINESE PINK) (B)—Mixed; many distinct and beautifully marked varieties. Pkt., 5c; ½ 27., 25c.

DIGITALIS (FOXGLOVE) (P)—Handsome ornamental hardy plants of stately growth. The seed, though small, germinates readily and the plants succeed well even in poor soil if given a half shady location. The spikes are often 3 to 5 feet long and thickly strung with scores of thimble-shaped flowers. Mixed colors. Pkt., 5c.

DIMORPHOTHECA AURANTIACA (A)—The Golden Marguerite. A rare and extremely showy annual from South Africa which has become a great favorite on account of its very easy culture and beautifully colored flowers. Its Marguerite-like blossoms, produced in great profusion, are 2½ to 3¾ inches in diameter. These are a unique glossy rich orange gold, which brilliant coloring is rendered more conspicuous by the dark disk surrounding the black zone. Pkt., 10c.

ESCHSCHOLTZIA (CALIFORNIA POPPY) (A)—The State Flower of California; an annual of rich, rare tints of yellow and orange. About a foot in height, beautiful foliage and large, poppy-like flowers. Pkt., 5c; ½ 0z., 20c.

FOUR O'CLOCK (MIRABILIS) (A)—Is also called Marvel of Peru. A handsome, free-flowering, sweet-sceated plant. They open their blossoms about four o'clock in the afternoon, hence their name. Hardy annuals. Choice mixed varieties. Pkt., 5c; oz., 15c.

FORGET-ME-NOT (MYOSOTIS) (P)—A modest little flower, to friendship ever dear. (See also Flowering Plants.) A pretty trailer with blue flowers. Pkt., 10c.

GERANIUM (P)—Comporatively few are aware that Geraniums may be grown easily from seed and flower the first season if sown early. This is the best way to secure Geraniums, as they will frequently reward the cultivator with charming new varieties. In fact, propagation by seed is the only way to obtain new varieties. Pkt., 15c.

GODETIA (A)—An attractive, hardy annual deserving more extensive cultivation. The plants bloom profusely and bear showy flowers of rich and varied colors, one and one-half inches. All colors, mixed. Pkt., 5c.

GOURDS (ORNAMENTAL) (A)—Rapid growing, interesting annual climbers with handsome foliage and singular shaped fruit. Mixed varieties. Pkt., 10c; oz., 20c.

GYPSOPHILA, OR BABY'S BREATH (A)—A pretty, free-flowering plant. Fine for bouquets. Pkt., 5c.

HOLLYHCCKS (P) — These fine, old-fashioned perennials are most striking when plant1 ed in groups or long rows; their variety of color is wonderful. When blants are once obtained they last for several seasons. Double, mixed colors. Pkt., 10c.

representation of the control of the



LOBELIA (A)—A very valuable and beautiful dwarf-growing plant, delicate drooping habit and profusion of charming little blue and white flowers. Choicest mixed. Pkt., 10c.

LARKSPUR, OR DELPHINIUM (A)—One of the most showy and useful plants, making useful border flowers. Pkt., 5c; oz., 20c.

MOON FLOWER, OR IPOMEA, MEXICANA GRANDIFLORA (A)—Rapid growing climber, belonging to the Morning Glory family. The flowers are large, waxy white and very showy. Pkt., 10c; ½ 0z., 20c.

MORNING GLORY (A)—New Japanese; the surpassing charm in this grand variety lies in the entrancing beauty and gigantic size of the flowers. Pkt., 10c; 02., 20c.

MORNING GLORY (A) — Tall, fine mixed; a great variety of colors of the popular old-fashioned sorts. Pkt., 5c.

MIMULUS (P)—Moschatus, or Musk Plant. Cultivated for its rich musk odor. Should have a rich soil and ample moisture. Hardy and perennial. Pkt., 10c.



MARIGOLD (A)—Well known, extremely showy garden plant, with handsome double yellow and brown flowers of varied shades; succeeds in good garden soil. Annual. Pkt., 5c; oz., 35c.



Mignonette

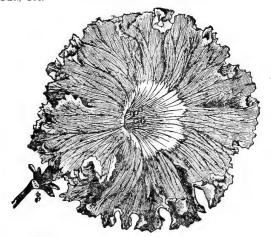
MIGNONETTE RESEDA (A)—A well-known fragrant favorite, and no garden is complete without a bed of Mignonette. Sowings are made in April and again in July, will keep up a succession from early summer until frost. Pkt., 5c; oz., 25c.

NASTURTIUM, TALL OR CLIMBING (A)—A very well-known ornamental, profuse flowering plant, adapted for rock work. The seeds, if picked young, are an excellent substitute for capers. Pkt., 5c; oz., 10c; ½ lb., 25c.

NASTURTIUM. TOM THUME OR DWARF (A)—When planted in beds or masses the brilliant effect of these splendid flowers is scarcely surpassed by any of our finest bedding plants. Pkt., 5c; oz., 10c.

NIGELIA—LOVE IN A MIST, OR DEVIL IN TUBUSH—DAMASCENA (A) — A compact, free-flowering plant, with finely cut foliage, curious-looking flowers and seed pods; of easy culture, growing in any garden soil; hardy annuals; blue and white mixed. One foot. Pkt., 5c.

NICOTIANA—AFFINIS (Tuberose-Flowered Tobacco) (A)—Delightfully sweet-scented, pure white tubular flowers, blooming continually; annuals; two to three feet high. Pkt., 10c.

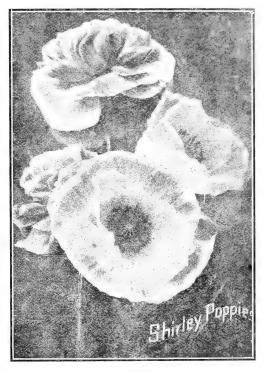


PETUNIA (A)—For outdoor decoration or house culture few plants are equal to this class. They commence to bloom early and continue to flower through the summer. Give them a rich soil and sunny place. Fine mixed, pkt., 5c; ½ oz., 25c. Fancy mixed, pkt., 10c.

PENTSTEMON (P)—Handsome, half hardy, herbaceous perennials about two feet high and much in favor for bedding out. Flowers bell-shaped or tubular, an inch and a half long, borne in racemes or spikes, white and various shades of rose and purplish red striped with white. Mixed. Pkt. 10c.

PORTULACA. OR ROSE MOSS (A)—Brilliant, dwarf annuals, only six inches high, luxuriating in warm situa tions and blooming profusely from early summer to autumn. For low beds and masses of color, from spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, striped, white, etc. Mixed. Pkt., 5c; ¼ 0z., 20c.

PRIMROSE (CHINESE) (P)—The culture of these lovely flowers is much easier than most people think. Our mixture includes not only all the choicest colors of the single flowering Primulas in all their dainty shades, but it comprises also seed saved from hybridized flowers, and will produce a number of double flowers and the new blue Primula. Pkt., 10c.



POPPIES

Probably no class of plants enjoys greater popularity and is more widely grown than the annual poppies; this is especially true of the single varieties. They are easily grown, and should be sown in beds or wild patches, in the fall or early spring, where they will grow high above the grasses on tall graceful stems.

CALIFORNIA POPPY (A) -See Eschscholtzia. Pkt., 5c; oz., 20c.

SHIRLEY (A)—The most beautiful type of poppies, having soft, hairy foliage, and a variety of single blossoms in white, pink, lavender, purple, red and scarlet. Free blooming, and fine for bedding or tall border. Pkt., 5c; 0z., 25c.

SINGLE, MIXED (A)—All single varieties and colors. Pkt., 5c; oz., 20c.

PEONY FLOWERED (A)—Large, showy, double, globular flowers: mixed colors. Pkt., 5c; oz., 20c.

ICELAND (P)—A graceful, delicate variety, with dark red single flowers, the petals resembling crumpled tissue paper. The plant is low-growing, but the stems are long and slender. Pkt., 10c; ½ oz., 40c.

ORIENTAL POPPY (P)—One of the showiest of perennials with enormous scarlet flowers with purple centers. The leaf is long and deeply cut and clothed with white bristly hair. Beautiful among shrubs, roses and other perennials. Pkt., 10c; ½ oz., 25c.



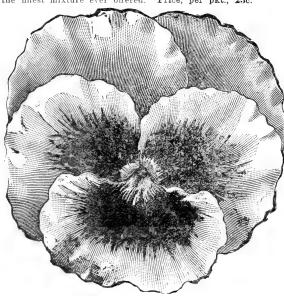
PHLOX DRUMMONDII (A)—Of all summer-flowering annuals the varieties of Phlox Drummondii are unques tionably one of the most brilliant and satisfactory. Seed may be sown in the open ground any time after danger from frost is past, and in a few weeks the beds or borders are aglow with their brilliant coloring and remain so until cut down by frost. For early flowering they should be started indoors or in a hotbed. Mixed colors. Pkt., 5c; 1/4 oz., 50c.

Pansies

PANSY (VICLA ARICOLOR) (P)—A half-hardy perennial, growing four to six inches high and probably the best known and among the most popular flowers in cultivation. It thrives best in a moist, shady location, and in rich, loamy soil. Seed should be sown in the autumn for early spring blossoms, or can be sown early in the year for good flowers later in the spring.

Steele's Mastodon Pansies

For years the Steele Pansy Gardens have grown our Giant Pansies. These have been carefully reselected and bred up to their present surpassing excellence, and for giant size, substance, form and coloring we have never seen Pansies to compare with them. Named varieties and special strains are grown separately and the seed collected by hand and carefully blended into what we believe to be the finest mixture ever offered. Price, per pkt., 25c.



TRIMARDEAU GIANT, MIXED-A splendid mixture of various shades and markings. The blossoms are perfectly round and are blotched at the base of three to five of the tals. Pkt., 10c. FINE MIXED—A fine assortment of colors. Pkt., 5c.

RICINUS, OR CASTOR OIL BEAN (A) -Ornamental plants of steady growth and picturesque foliage with brilliant colored fruit, producing a sub-tropical effect; fine for lawns, massing or center plants for beds. Pkt., 5c; oz.,

SCHIZANTHUS (A) - Hardy annuals, growing one and one-half to two feet high and covered with bright, showy, butterfly-like blossoms. Large flowering. Mixed. Pkt.,

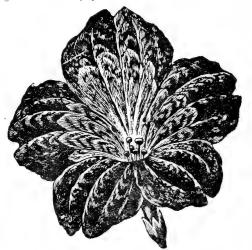
SWEET SCABIUS, OR MOURNING BRIDE (A)-Free-flowering annuals; colors, white, carmine, lilac, maroon, etc. Very effective for garden decoration and valuable for cutting. Dwarf or tall double mixed. Pkt., 5c; 1/4 oz., 15c.

SALVIA, OR FLOWERING SAGE (P)-A tender perennial blooming the first season from seed and growing two to three feet high. The blossoms are borne on long stems in racemes or spikes, and are fragrant. The plant forms a bunch and blooms profusely during the whole summer and fall. Fine mixed. Pkt., 10c.

SMILAX (BOSTON IVY) (P)-Charming, tender, perennial climber for greenhouse or window gardens. foliage and stems are of a pleasing light green; very graceful; excellent for decoration. Pkt., 10c; 1/4 oz., 25c.

SCARLET RUNNER (A) -Ornamental and useful; the vine is graceful; flowers are of a brilliant scarlet and the beans are of an excellent quality, either when shelled or in a dry state. Pkt., 5c; lb., 25c.

SNAPDRAGON, OR ANTIRRHINUM (P) -One of the most useful and showy of border plants. Of almost every color, and striped as beautifully as Carnations. They have recently been much improved and are now really magnificent. Hardy perennial. Finest mixed. Pkt., 5c.



Salpiglossis (Velvet Flower)

SALIPGLOSSIS (A)—The quaint, funnel-shaped flowers somewhat resemble those of the Petunia; beautiful range of colors. Pkt., 5c; ½ 0z., 25c.

LARGE FLOWERING, 10-WEEK STOCK (A) -This is the leading class for bedding out or summer-blooming. All varieties, mixed. Pkt., 10c; ¼ oz., 50c.

SWEET WILLIAM (P) -A well-known, attractive, freeflowering, hardy perennial, producing a splendid effect in beds and borders with rich and varied flowers. The demand for separate colors has induced us this season to offer several of the best and most distinct flowering sorts. Mixed. Pkt., 5c; oz., 25c.

WILD FLOWER GARDEN MIXTURE (A) --- A garden is not complete without a bed of this mixture of flowering annuals. A package will sow a bed about two by ten feet, and if sown early in the spring will furnish continual bloom throughout the season. Pkt., 10c; oz., 50c.

VERBENA (A)-Very few annuals will make such a gorgeous display during the summer months or furnish more flowers for cutting, than the Verbenas. Start seed in the house or under glass early in the spring and transplant after three or four inches of growth. They flower in July and continue strong and healthy until destroyed by frost. Fine mixed. Mixed, pkt., 5c; 1/4 oz., 20c.



Violets

VIOLETS (P)-Viola Odorata is the well known English Violet, a free-flowering, hardy perennial. Easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places. Choice mixed. Pkt., 10c.

WALL FLOWER (P)—Produces spikes of beautiful, exceedingly fragrant flowers. Half-hardy perennial. Mixed. Single, large flowering. Pkt., 5c.

WILD CUCUMBER (A)—A well-known vine, common in many sections, and the quickest climber known for covering verandas, old trees and houses, trelises, etc., never suffering from the heat, but retaining its fresh lively green color; never infested with insects and very profuse in bloom. It will sow itself and come up in the same Pkt., 5c; oz., 20c.



ZINNIAS (Youth and Old Age) (A)-Is one of the most brilliant and showy annuals, and has long been a general favorite. The seed can be sown early in the hotbed and transplanted, or sown later in the open ground. They come in flower early in the summer, and

frost. Choice mixed. Pkt., 5c.

SWEET PEAS

No garden is too small for a row of Sweet Peas and no No garden is too small for a row of Sweet reas and no estate, however extensive or magnificent, should fail to include many varieties of this most popular flower. Hundreds of varieties have been offered for sale by seedsmen but owing to recent marked improvements many sorts are decidedly inferior and have been dropped from our list.

CULTURE-Early in spring make a trench three to four colly the Early in spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it and plant the seed in the bottom, covering at first only one inch deep. Sweet Peas, particularly the white seeded sorts, are often a little difficult to start. If the soil is too dry they will remain a long time without germinating; if it is too wet and cold they will not sprout at all. In soils at all heavy, or composed largely of clay, put about one inch of sand in the bottom of the tremen and sow the seed n this, covering with more sand. Cover the row with a board to shed the rain and protect the soil from the hot sun but remove this as soon as the young plants appear. When the plants are two inches high, cultivate and as they grow gradually fill up the trench. When the plants are about five inches high it is desirable to furnish some support for the vines to run upon. The roots should not be allowed to become to run upon. The roots should not be allowed to become too dry. Water applied thoroughly once or twice a week, preferably early in the morning or in the evening, is usually better than light sprinkling more frequently. The blooms should be picked before they form pods or the plants will soon stop flow-



Select list of fine Flowering Sweet Peas, the best of their color and type

PRICES: 5c per pkt.; 15c per oz.; 1/4 lb., 35c; per lb., \$1.10, postpaid.

Light Pink

STELLA MORSE—Flowers of a peculiar warm salmonnk. A combination yellow and pink which is distinct and very attractive.

LOVELY-The most beautiful shades of soft shell-pink, changing to very light rose at the outer edges. flowers of large size.

MISS WILLMOTT—Described as an "orange-pink" delately shaded rose. Enormous flowers, borne erect on icately shaded rose. long, stiff stems.

PRIMA DONNA—A most beautiful bright shade of blush-pink. Flowers of large size and finest form.

Cream or Light Yellow

HON. MRS. E. KENYON-Rich, primrose. A bold, giant ower. The best in this shade.

Purple and Maroon

BLACK NIGHT—One of the darkest varieties. COUNTESS CADOGAN—Large flowers. The color effect is that of a bright blue.

OTHELLO—A deep maroon self-color; very large.

Striped and Variegated

SENATOR. PRINCE OF WALES.

Lavender and Blue

NAVY BLUE-A true blue.
COUNTESS OF RADNOR-Self-colored in a very distinct and beautiful shade of lavender.

Orange and Salmon

HENRY ECKFORD—A distinct orange scarlet of the finest form and largest size; as beautiful under artificial light as in daylight.

Red Standards, White Wing

BLANCHE FERRY—Bright pink standard and nearly white wings.

Shades of Red

KING EDWARD VII—A lovely, intense crimson. A truly giant-flowering variety. The finest crimson to date. Strong stems and growth.

MAJESTIC-Fiery carmine, wings rose-madder.

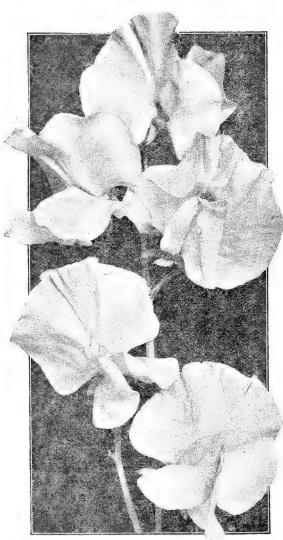
PRINCE OF WALES-Rose pink.

White

BLANCHE BURPEE—A splendid pure white variety. While not so profuse a bloomer or as hardy a plant as the Emily Henderson the flowers are fine.

EMILY HENDERSON—A bold, well formed, clear white flower. Wings broad and well expanded. An early and wonderfully free and persistent bloomer.

Sweet Peas--Countess of Spencer Type



SWEET PEAS

COUNTESS OF SPENCER TYPE—This new strain is very popular as they produce flowers usually from one-quarter to one-half again larger than the old type of sweet peas, besides the standards and wings are fluted and gracefully formed, thus the appropriate name of Orchid Flowerea

Sweet Peas. Our stocks are true selected type, and as they are not as free flowering as the old-fashioned sweet peas, are consequently higher in price.

KING EDWARD VII SPENCER—The standard is a deep, rich carmine scarlet of glossy effect. The wings are also carmine scarlet, and on the reverse side are also a deep rose carmine. Pkt., 10c; oz., 25c.

FLORENCE MORSE SPENCER—Delicate blush with pink margin. Very large open wavy form of the best Countess Spencer type, with longstems and four blossoms to the stem. Perhaps better described as a light pinked gedCountess Spencer. Pkt., 10c; oz., 25c.

PRINCESS VICTORIA—White blush and pink-edged Spencer. Pkt., 10c; oz., 25c.

QUEEN VICTORIA SPENCER—The flowers are extremely large, of the true waved Spencer type, and have a most pleasing color effect. The background is quite a deep primrose flushed with rose. The flowers are all of good substance, borne three and four on a stem. Pkt., 10c; 0z... 25c.

WHITE SPENCER — Flowers absolutely pure white. Standard is waved, crinkled and fluted; three to four blossoms to a stem. Stems 12 to 15 inches in length. Pkt., 10c; oz., 25c.

MRS. HARDCASTLE SYKES, OR PALE PINK SPENCER—Flowers of purest pale pink. Pkt., 10c; oz., 25c.

PRINCE OLAF—The bold effective flowers are striped and mottled bright blue on white ground; of good size, with erect expanded standard; the flowers are borne frequently four to the stem. It is a very profuse bloomer. Pkt., 10c; oz., 25c.

IVY MILLER—It is a bluish white, with a little more color on the back of the standard and it is Picotee edged variety, having a distinct edge of darker color around the standard and wings. Price, pkt., 10c; ob., 25c.

DAINTY SPENCER—White suffused and edged with pink; large and of Spencer form; very free blooming. Price, pkt., 10c; oz., 25c.

PRIMROSE SPENCER—The best Primrose Sweet Pea yet developed. True Spencer type, large wavy petals, frilled at edges; clear, distinct color. Pkt., 10c; oz., 25c.

FLORENCE NIGHTINGALE—Known to be the largest and best Lavender Spencer yet introduced. The standard is unusually large and bold, pronouncedly waved, yet standing erect and broad—frequently measuring two inches across. The color is of a most charmingly soft clear rich lavender, which is enlivened by a very faint sheen of rose-pink. The large well-spread wings are of the same coloring, frilled and well waved. It is practically a self-color and bunches beautifully—attracting universal admiration. Pkt., 10c; ½ 0z., 25c; 0z., 40c.

MARIE CORELLI—The wings are a pure rich rose-crimson, while the standard shows a tint of cherry-red. The whole effect is that of a brilliant crimson—clear, distinct and most beautiful. The standard is large, round and wavy; the wings are full and inclined to remain boldly outright instead of drooping. The long strong stems usually bear four flowers each.

Pkt., 10c; 1/2-0z., 20c; 0z., 35c.

SPENCER SWEET PEAS—All varieties mixed. Pkt., 16c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

For cultural direction of Sweet Peas, see Page 74.

Hardy Climbing Vines

VIRGINIA CREEPER—Has large, luxuriant foliage, which in autumn assumes the most gorgeous and magnificent color; one of the finest vines for covering trellises, or verandas. Each, 50c postpaid.

CLEMATIS JACKMANNI—This variety, strong growth, hardy nature and rich, deep velvety-purple flowers, is the most satisfactory of its class. Blooms with astonishing profusion. Price, 75c postpaid.

HONEYSUCKLE - Grows vigorously, with yellowish white, fragrant flowers. Price, 50c postpaid.

HOPS—Are the most rapid growers of any vine coming from the roots each spring. Their rapid growth and large broad leaves cover a porch before the arrival of the hot days of summer. 60c per doz., postpaid.

CINNAMON VINE-This climber is appropriately called CINNAMON VINE—This climber is appropriately called Cinnamon Vine. Very hardy, the stem dying down every autumn, but growing again so rapidly as to cover completely any trellis or arbor early in the season. With its heautiful heart-shaped leaves and clusters of delicate yieldowers, and most delicious cinnamon odor, is a most desirable climber. 5c each, 50c per doz., postpaid.

6MADEIRA VINE—A beautiful rapid climber, bearing graceful racemes of fragrant white flowers; very pretty and useful. 5c each, 50c per doz., postpaid.

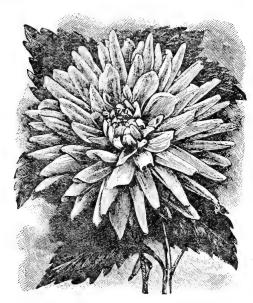
BULBS

Summer Flowering Bulbs

There is nothing in floriculture that will give greater satisfaction or produce such grand results as this crass of bulbs, which includes some of our showiest garden flowers. They are of the easiest culture. Planted in Spring in good garden soil, they flower with great certainty during Summer and Fall. The hardy sorts may remain in the ground over Winter, but tender sorts should be taken up after the foliage dies in the Falls, and the bulbs stored away in a dry, cool place until planting time the next Spring.

Dahlias

The Dahlia is one of the most popular summer and fall flowering bulbs, and is a general favorite, and should have a place in every garden. The flowers are very showy and gorgeous. The varieties listed by us are exceptionally fine, each one being a gem in itself.



Cactus Dahlias

For cultural directions of Dahlias, see

The Cactus forms of Dahlias are exceedingly beautiful. and are hard to excel. They have long twisted petals and embrace nearly all the colors and shades to be found in any of the other types.

Standard Sorts

BURBANK-Deep clear dark red. An excellent bloomer which never under any circumstances shows the least tendency toward an open center, no matter how dry the weather or poor the soil.

WINSOME-Undoubtedly the gnest white Cactus to date. Flowers are very large and beautiful, with twisted. incurved petals and are borne on long, erect stems, holding the flower up in marked contrast to other white Cactus

INNOVATION-The finest bi-colored Cactus Dahlia. The center is of a deep scarlet, the extremities of the petals

KATHERINE DUER-The most beautiful glowing scarlet without markings. The flowers are of immense size, 7 inches across, opening out flat and showing no center, with wide and rounding petals. The plant is a strong grower. Height 5 feet.

KRIEMHILDE-An exquisite shell-pink shading to white in the center. Undoubtedly the finest and most perfect pink Cactus Dahlia to date, and as a cut flower supersedes all the other pink sorts.

Price: Each, 25c; entire six, \$1.25 postpaid.

Standard Dahlias

CRIMSON GIANT-Deep crimson flowers of immense

HENRY PATRICK-A pure waxy white. It blooms very freely, producing flowers from 5 to 7 inches in diameter

MRS. ROOSEVELT-A most delicate pink flower, immense in size, graceful in form and having excellent stems for cutting. Perfectly double, 6 to 8 inches in diameter.

PRES. F. FAURE-A deep purplish crimson with broad thick petals.

SYLVIA-White shading to soft pink on the outer petals which are of great substance. The flowers measure about 5 inches, are fine in form and full to the center, making it a great shipper. The plant is a strong and healthy grower.

WM. AGNEW-The richest shade of intense, dazzling red. Flowers are large, measuring more than 5 inches in diameter.

V COLOSSE-A clear yellow exhibition variety. The flowers are very perfect and on long stems.

Price: Each, 25c; entire six, \$1.25 postpaid.

Novelties in Dahlias

AURORA CACTUS—An attractive soft pink, slightly tipped white, brilliant golden in the heart. One of the best Dahlias for exhibition, being colossal in size, elegant in form, most perfect in type and of the most exquisite coloring.

OTHELLO CACTUS—Dark blood red with a velvety black sheen. An early and free bloomer with stalks long and strong, carrying flowers well above the foliage.

JEANNE CHARMET (Peony Flowered)—Bright pink with crimson edges. Flower 7 to 8 inches in diameter with long, wide, loosely formed petals. Center covered with short petals. Flowers borne on fine long stems. Early and extra fine. and extra fine.

BIG CHIEF (Peony Flowered) - Brilliant cherry-red, margined rich velvety maroon. A strong vigorous grywer, producing its immense semi-double flowers, 6 to 7 inches across, on 2-foot stems, in greatest profusion.

Price: Each, 75c; four, \$2.50 postpaid.

Page 74.

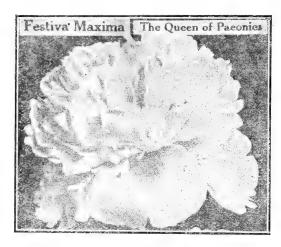
Gladioli

Gladioli are the most satisfactory, desirable and popular of all the garden bulbs. Nothing else of the kind cost so little, grows and blooms so readily in any soil or climate as Gladioli. They thrive and bloom with the least care and attention, and make a display volume of the coloring few bulbs can equal and none surpass. Gladioli are of the simplest culture. Plant any time from March to June.

GLADIOLI CHILDSI—Finest mixed. This won derful new giant type originated in Germany; is of much stronger growth and large flower than the original type. By mail, 5c each, or 40c per doz.



Paeonies



FESTIVA MAXIMA—The best known Peony. Flower of immense size—7 to 8 inches in diameter—snow-white, with some red spots on the edges of the center petals. Very sweet. Early. Price, postpaid, 60c.

QUEEN VICTORIA.—Guard petals milk white, tinted flesh, center creamy white with crimson spots, large globular flower, on stems of medium height, free bloomer, midseason. Price, postpaid, 30c.

M. BOUCHARLET—Bright pink. Of medium size and excellent form. A good grower and of compact habit. Valuable lawn sort. Midseason. Price, postpaid, 50c.

KOHINGOR—Shell pink, very free, splendid cut flower sort, midseason. Price, postpaid, 30c.

LEE'S GRANDIFLORA RUBRA—Rich red, resembling American Beauty Rose, of enormous size and long stem. One of the latest and best. Price, postpaid, 60c.

OFFICINALIS RUBRA PLENA—This is the old-fashioned red, the most brilliant of all red Peonies. Early and splendid cut flower. Price, postpaid, 30c.

Lilium Auratum

The handsomest and best known of the Japan Lilies. Its immense ivory-white flowers are thickly studded with yellow and crimson spots, while in the center of each petal is a gold band fading at its edges into white; very fragrant. They bloom from June to October. Large bulbs, each, 15c; doz., \$1.50.

Lily of the Valley

One of the most satisfactory and charming Spring flowering plants, producing in profusion its deficate bell-shaped, delightfully fragrant white flowers. Lillies of the valley thrive in any common soil, are perfectly hardy, and will succeed in shady situation. Selected tips each, 5c; doz., 40c.



Fall Bulbs

We carry in season a selected stock of Fall Bulbs, and as we do not issue a bulb catalogue, we list here the most popular and easy growing varieties.

Hyacinths (Single)

Dark Red, Yellow, Rosy Pink, Purple, Light Blue, White. Price, 6c each, 65c per dozen.

Hyacinths (Double)

Dark Red, Ytllow, Rosy, Pink, Purple, Light Blue, White. Price, 6c each; 65c per doz.

Roman Hyacinths

Blue, Pink. Price, 6c each; 75c per doz.

Single Early Tulips

Scarlet, White, Yellow, Purple, Pink, Striped. Frice, postpaid, 3c each; 30c per doz.

Double Tulips

Scarlet, White, Yellow, Rose, Purple. Price, postpaid, 4c each; 35c per doz.

Parrot Tulips

Crimson, Yellow, Yellow Bone-tipped. Price, postpaid, 3c each; 30c per doz.

Narcissi

Single, Double, Grandiflora. Price, 4c each; 40c per doz.

Freesias

REFRACTA ALBA-Postpaid, 3c each; 30c per doz.

Crocus

Price, dozen, 15c; 100, \$1.00.

Jonquils

Single, Postpaid, 3c each; 30c doz. Double, postpaid, 4c each, 35c doz.

Iris

SPANISH-Each, 3c; doz., 30c.

Snowdrops

....DOUBLE-Each, 3c; doz., 30c; 100, \$2.00.

Oxalis

Price, each, 4c; doz., 35c.

Scillas

SIBERICA-Each 3c; doz. 25c.

SEED POTATOES

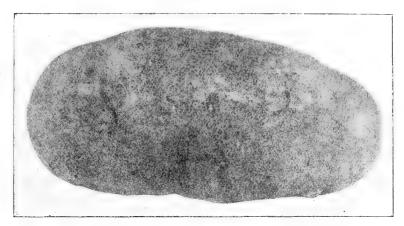
EARLY ROSE—This variety has been a great favorite for many years and many growers still claim that it has never been excelled in quality and productiveness. Potatoes are long in shape, good size and light pink in color at the bud end. They cook mealy and are of the finest flavor. Price, postpaid, 3 lbs., 50c; freight, 25 lbs., 75c; 100 lbs., \$2.00.

EARLY OHIO—A leading early sort, earlier than the Early Rose, but not so productive. Round short, and thick tubers, smooth and solid; cooks dry and mealy and ma-

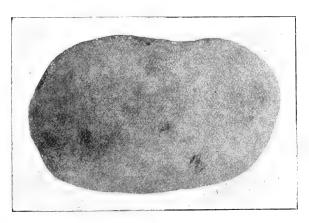
tures very early. Price, postpaid, 3 lbs., 50c; freight, 25 lbs., 75c; 100 lbs., \$2.00.

WHITE OHIO—These are the same in all particulars as the Extra Early Ohio except in color, which is white or nearly so. White potatoes are preferred in most all markets and as this sort is just as early, of as good quality and as productive as the Early Ohio, it will unquestionably supersede the older variety when it becomes better known. Price, postpaid, 3 lbs., 50c; freight, 25 lbs., \$1.00; 100 lbs., \$2.50.

NETTED GEM—The hardiest, most vigorous in growth, most productive, and the best in table quality of all potatoes. It has proved to be unequaled for main crop. The vines are strong, with deep green foliage, making a healthy growth when other varieties are cut down by blight. In form the tubers are medium long. The eyes are small and there is very little waste in paring. The skin is thin and very smooth with the exception of very small depressions which give it the appearance of being netted and from which it derives its name. Its color reminds one of a Golden Rus set apple. The flesh is fine grained and cooks up mealy white. It is very free from scale and one of the very best keepers on the market. One grower tells us that they were in excellent condition in October, one year after being dug. These potatoes command the hiehest prices in all markets where they have been introduced. Price, postpaid. 3 lbs., 60c; freight, 25 lbs., \$1.25: 100 lbs., \$3.90.



Netted Gem



In order to increase the yield of Potatoes, use Clover Leaf Vegetable Fertilizer, see Page 37.

MacGregor

MACGREGOR—This new, late potato originated in Manitoba about six years ago and immediately became a general favorite. In appearance it closely resembles the old, well known Carmen No. 3, same shape, with nice white netted skin, a grand good cooker at all times, a remarkable keeper and a tremendous yielder.

One of the most noticeable features of this potato is its wonderful vigor. It will send up a big strong vine and frequently give a good yield where other varieties would be a total failure. It has captured more first prizes

at the Interstate Fair during the last three years than any other potato. Price, posvaid, 3 lbs., 60c; freight, 25 lbs., \$1.25; 100 lbs., \$3.00.

BURBANK (A Standard Late Variety)—Continues in good demand and is more largely used than any other. It is of good size, of fine form and an excellent yielder. The flesh is white, very mealy and of fine flavor and quatity. The best potato for baking. This variety is well adapted to heavy soils. Price, postpaid, 3 lbs., 50c; freight, 25 lbs., 75c; 100 lbs., \$2.00.

CLOVER and FIELD SEED

TAKE NOTICE

Great care should be exercised in purchasing grass and clover seeds. This is even more important than with other seeds, for on account of being perennials, and the land not being cultivated, it is difficult enough at the best to keep weeds down, without sowing weed seeds. Also, they are the most easily adulterated with cheaper seeds or dead seeds which will not germinate, and for that reason it is more economical to buy the very best seed obtainable at the highest price than ordinary seed at half the price. Cheap seed is expensive at any price.

That buying poor seed at a cheap price is not always economy is proved by experiments made by the Depart-

economy is proved by experiments made by the Department of Agriculture, reported in the Indiana Station Circular No. 31. An analysis of high-grade red clover seed, purchased by the government, showed that a bushel of the seed, that would grow, would cost \$10.15. The low-grade seed purchased had so many impurities that \$27.53 grade seen purchased had so many impurities that \$27.53 was spent in getting a bushel of good seed out of it. Similar examination of alfalfa seed showed a cost of \$13.12 for the high-grade seed and \$19.66 for the low grade. High-grade timothy cost \$2.62 per bushel and the low-grade \$3.17.

Owing to the extreme market changes we cannot print prices good for any length of time. When ready to buy write us for prices, stating quantity wanted, or if you send money, we will ship seed to cover amount sent.

Alfalfa, or Lucerne Clover

The most valuable forage plant; is particularly adapted for our Western climate and soil. It requires a deep, mellow soil; newly broken sod does not do so well. It thrives best in a sandy loam, the richer the better, while it has not proved a success on heavy compact clay soil. In the driest and most sultry weather, when every blade of grass withers Al. every blade of grass withers. Alfalfa is as fresh and green as in the soring, as its roots go down from 10 to 20 feet to the moisture of the ground. Although a pradigious vielder, it does not exhaust the soil, but rather improves the ground by the decay of its low. the soil, but rather improves the ground by the decay of its long roots, and converts it into wind for vegetable matter. ground full of vegetable matter. The seed may be grown early in the spring, as soon as the frost is



out of the ground, in order to catch the spring rains, as it needs moisture to germinate. In localities where irriganeeds moisture to germinate. In localities where irrigation is used it can be sown successfully at any time during the summer months. Most of our successful Alfalfa growers prefer sowing the seed broadcast, while others are more in favor of drilling it in. It is more difficult to establish the first year, but will, when once started, produce a profitable crop; under favorable circumstances three and even four crops are cut yearly, aggregating five to seven tons to the acre. Never sow less than 15 pounds of good, clean seed to the acre, as thin sowing produces thick and coarse stalks not relished by stock. If intended to raise Alfalfa for the seed, 12 to 15 pounds is plenty to sow on acre. It is worthy of trial in any locality where it has not already been tested. Per Ib., postpaid, 35c; has not already been tested. Per lb., postpaid, 35c; 100 lbs., write for prices.

Turkestan Alfalfa

This new Alfalfa, introduced from Turkestan, has been experimented with more or less for the past few years. experimented with more or less for the past few years. In some places it has proved a great success. In general appearance it is very much like our regular growth in the driest and hottest sections without irrigation. It is perfectly hardy and will stand extreme cold in winter without harm. It yields a very heavy and rich crop of hay and makes permanent pasture. We have secured a good stock of the pure, genuine seed, which we offer at the following prices: Per lb., postpaid, 35c: t100 lbs., write for prices.

Dry Land Alfalfa

For high, dry, hot land. We are now able to offer in quantity this new Dry Land Alfalfa, which will produce large, profitable crops of hay and excellent pasture on the high, dry lands of Eastern Oregon, Washington, Idaho and Utah. This is especially recommended for the hills and

plateaus which are above irrigation ditches or in sections where irrigation is impossible. The new 'Dry Land' Alfalfa is what might be called 'a new strain, acclimated to dry land.' Price per lb., post paid, 35c; 100 lbs., write for prices.

Mammoth Red Clover

Being a rank grower makes it most valuable for fertilizing purposes. Foliage, flower and stem much darker than common Red Clover; ripens later than the latter, about the time Timothy Red Top and other grasses ripen, making thereby a much better quality of hay, when mixed with them. Sow 12 to 15 lbs. to the acre. Per lb., postpaid, 40c; 100 lbs., write for prices.

Alsike, or Swedish Clover (Trifolium Hybrium)

A perfect hardy va-riety which is rapidly which is rapidly growing in popular fa-vor. It yields large crops of excellent hay, and under favorable conditions may be cut several times during the season. It is also valu-able for bees. It is well drought and excessive moisture. The hay of this variety is greatly preferred by some to that of Red Clover, for the reason that it is generally finer, brighter and not so dusty, making it better for horses. It is perennial and produces a mass of long fibrous roots which hold the soil, making it useful for permanent pasture on hill-sides which are liable to wash. When used alone sow from eight to ten pounds per acre. Per lb., postpaid, 40c; 100 lbs., write for prices.



White Dutch Clover (Trifolium Reptns)

A small variety having a white blossom. A smail variety having a white blossom. It is of a vining nature, spreading rapidly and will soon cover bare spots if the stand be even. It does not attain sufficient height to be profitable for hav, but is superior for pasture, either for cattle or sheep, and unsurpassed for the produc-It also makes a beautiful lawn when mixed with Blue Grass. If sown alone, use six to eight pounds per acre. Fancy for lawn. Per lb., postpaid, 60c; 100 lbs., write for prices.

Medium Red Clover



RED CLOVER.

The standard clover for all purposes, either hav, pasture or for improving and enriching the soil. It is hardy and succeeds well on any good soil. It vields the heaviest crop of any clover except alfalfa, and makes superior hay-especially if mixed with timothy-either for dairy cows or for general use. Sow from twelve to fifteen pounds per acre, being careful to get it evenly distributed over the ground. Per lm., postpaid. 40c; 100 lbs., write for prices.

For Books on Farming, see Page 74.

CLOVER & FIELD SEED—Continued

Bokhara, Sweet or Honey Clover (Melilotus Alba)

A rapid growing, white flowered sort; excellent for bees. Sow ten pounds per acre. Per lb., postpaid. 35c.

Crimson, or Scarlet Clover (Trifolium Incarnatum)

Highly recommended for pasture and fertilizing purposes. It is a thrifty annual, growing from twenty to thirty inches high, and has a beautiful crimson bloom. It germinates quickly, grows rapidly and stools abundantly. Sow from twelve to fifteen pounds to the acre, and harrow it with a light harrow. Cut for hay when in full bloom. Per lb., postpaid, 30c; 100 lbs., write for prices.

Esperette, or Sainfoin (Onobrychis Sative)

A deep rooting, perennial legume, extensively cultivated on dry, calcerous soils which are too barren for clover or alfalfa. It is rather difficult to establish, as plants are easily killed when young, but when once rooted, will live from ten to twenty-five years. Sow 50 pounds per acre. ten to Per lb., postpaid, 30c; 100 lbs., write for prices.

Timothy Seed

Timothy is a native of Europe, but long ago naturalized in America, where it ranks as by far the most important of hay grasses. Its popular name, by which it is now known the world over, refers to known the world over, refers to Timothy Hanson, who did most to make it known and appreciated. On moist, loamy or clayey soil it produces a larger hay crop than any other grass It is not so well suited for light, sandy soils. Though preferring a moist, temperate climate, it withstands drought and extreme heat and cold. Its hay is very nourishing drought and extreme heat and cold. Its hay is very nourishing and can be preserved for a long time. It should be cut when flowering, as, if left later, the hay becomes hard and coarse. It is often sown along with red clover, and the nutritive value of the hay is greatly increased by the mixture. Height, 2 to 3 feet. Per lb., postpaid, 20c; 100 lbs., write for prices.



Italian Rye (Lolium Italicum)

This is distinct from the preceding, being of much larger and stronger growth, with large, broad, glossy green blades. It succeeds best in moist, fertile soils. About twenty pounds to the bushel; three bushels to the acre. Per lb., postpaid, 25c; 100 lbs., write for prices.



Red Top (Agrostis Vulgaris)

RED TOP (Agrostis Vulgaris)-In Pennsylvania and states further south, this is known as Herd's Grass, name applied in New England and New York to Timothy. 1t is a good, perennial grass, standing our climate well and makes good pastures when fod Is valuable for low, wet meadows, producing a large re-turn in good hay. When sown turn in good hav. turn in good hav. when sown alone, use twenty-eight pounds of the chaff seed per acre. Sow in spring or fall. Fancy (cleaned from chaff). Sow 8 to 10 pounds per acre. Per to 10 pounds per acre. lb.. postpaid, 30c; 100 1bs., write for prices.

Tall Meadow Oat Grass (Avena Elatio)

A hardy perennial much used in the south and west. Its roots penetrate deep, and it thrives on any good soil. It yields a heavy crop and is valuable for both meadow and pasture. If used alone, sow from thirty to forty pounds per acre. Per lb., postpaid, 35c; 100 lbs., write for prices.

Brome Grass (Bromus Inermis)

A perennial grass valuable for binding the soil of embankments and on account of its ability to resist both drought and cold. On light, dry soils it is used for both hay and pasturage, but it is not recommended for locations where better grasses will succeed. Should be used at the rate of twenty pounds per acre. Per lb., postpaid. 30c; 100 lbs., write for prices.

English Rye Grass (Lolium Percune)

This makes a quick growth very early in the spring, and adapted for cool, moist locations, recommended for fall seeding on Bermuda-grass lawns in the south, giving them a bright green appearance all winter. Twenty-four pounds to the bushel; three bushels to the acre. Per lb., postpaid, 25c; 100 lbs., write for prices.

Orchard Grass

No farmer should be without a small field of Orchard Grass, as in many respects it is superior to all other grasses. It stands the drouth, grows well in the shade, does well in wet or poor ground, and is splendid to prevent worn-out fields from washing. This grass furnishes excellent pasturage three weeks before any other, and after close grazing ten days' rest is sufficient for another growth. Cows fed on this will produce more and richer milk than on blue grass. It makes a very heavy sod and when well set remains for many years. It is especially adapted for winter grazing, as it remains green all season. Per lb., postpaid, 35c; 100 lbs., write for prices.





Kentucky Blue Grass



This makes the best, sweetest and most nutritious pasturage for all kinds of stock. Kentucky has long been famous for its high-bred horses and its blue-grass pastures. It is now possible to establish on most any farm a blue-grass pasture of greenest verdure which will give very profitable returns. This grass is the first to start up in the spring and remains green until snow flies in the fall. It is very hardy and is uninjured by cold or dry weather bet any creaming. dry weather, hot sun or tramping of hoofs. The roots are so thick and stout as to form a tough sod. Blue grass requires about two years to get well started and for that reason it is often sown in mix that reason it is often sown in mx ture with other grasses. It will do well on almost any land. Sometimes called "June Grass." From 20 to 25 pounds of "Sterline" grade seed required to the acre. Per lb., postpaid, 35c; 100 lbs., write for prices.

For Books on Farming, see Page 74.

Meadow Fescue (Festuca Pratensis)

A perennial variety growing three to four feet high. It deep, but resisting drought better than most grasses. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pasturage. Valuable to mix with other kinds. Use 20 pounds per acre when sown alone. Per lb., postpaid, 35c: 100 lbs., write

Canadian Blue Grass (Pea Compressa)

A hardy perennial growing on poorest and driest soils. Short (6 to 8 inches), hard and wiry, but high in nutritive value. Decidedly blue in color. Stems flattened. Invaluable for use on steep places or exposed situations. Sow three bushels to acre. Per lb., postpaid, 30c; 100 lbs., write for prices.

How to Make a Lawn

The ground should be spaded deeply and thoroughly, and The ground should be spaded deeply and thoroughly, and a good compost of decomposed and finely pulverized manure or rich loam spread over the ground. It would be well, also, to give a sprinkling f bone dust. Then use a slanted tooth harrow and a light or medium roller until the soil is smooth, even and firm. Then sow the seed and harrow again and smooth off with a common garden rake. When the grass has grown 2 or 3 inches in height use the lawn mower, gauged to cut full one inch above the ground; respect the serves of the serves to the baider. The repeat the same as often as it grows to that height. The repeat the same as often as it grows to that height. The weeds and foul grass can be kept down and destroyed by the repeated mowing. If this is neglected they will spread and take possession of the soil, but being constantly clipped, the leaf and seed stalks are destroyed and the foul vagatation discussed. foul vegetation disappears.

As a guide for the proper quantity to order, we may state that one pound of Fancy Mixed Lawn Grass Seed is sufficient to thoroughly sow an area of 20 feet by 15 feet—200 square feet. It should be borne in mind that in order to produce the best results grass seed for lawns should be sown at least thrice as thickly as if sown for hay.

As soon as the grass has become well established a dressing of good Lawn Fertilizer is necessary to keep up that heaviling fresh appearance.

that beautiful fresh appearance.

LAWN GRASS

Our Own Mixture

This is especially fine. Carefully prepared. Will give st results. Per lb., postpaid, 45c; by express, 10 lbs., best results. \$3.00.



Buckwheat

JAPANESE—This variety excels all others; yield much heavier; ripens one week to ten days earlier; stands up better and makes better flour. Excellent for bee pasture. Pr lb., postpaid, 20c; 100 lbs., write for prices.

SILVER HULL—A very good and popular variety. Grain is of light gray color, rounder than the common; has a thin husk; matures earlier and yields heavy. A good milling variety. Per lb., postpaid, 20c; 100 lbs., write for

MILLETS

GERMAN MILLET-No other grass or forage plant has been able to produce the enormous yield of this plant. It has produced four to five tons of hay to the acre, and from 70 to 80 bushels of seed. It is sown in the spring on newly broken prairie, and after harvesting it leaves the ground in the finest condition for wheat. Sowe 25 to 40 pounds to the acre. Per lb., postpaid, 20c; 100 lbs., write for prices.

MANITOBA, HOG MILLET -Very rich and thus especially valuable as a hog food. A very much prized peculiarity of this millet is that the seed ripens while the stem yet green, thus if cut promptly can be threshed for the seed, while the hay after being threshed will make excellent fodder. Sow same as other millet. Per lb., postpaid, 20c; 100 lbs., write for prices.

NEW SIBERIAN. OR RUSSIAN LIL-LET—Is claimed to be the most wonderfully productive and satisfactory forage plant, possessing in a superior degree all the essential merits of any of the older sorts - exceedolder sorts ing them by far—besides many other points of excellence and render it a most valuable addition to the list of forages, and, if the claims are well founded, destine it to take front rank. and if not lead all the rest. The claims made by its introducers are that it is from two to three weeks earlier than the German Millet. is a much heavier cropthat the hay is per. much finer, stalks more elastic and growing much taller, that it is rust-proof, and chinch bugs do not relish it, and being of stooling habit, requires much less Hog Millet seed per acre. You should try it. Per lb., postpaid, 20c; 100 lbs., write for



HUNGARIAN MILLET—This grass resembles millet very much. It is of fine growth, and makes an excellent hay. It has numerous succulent leaves, which furnish an abundance of green fodder, taken by all kinds of stock. Sow 25 to 30 pounds to the acre. Per lb., postpaid, 20c; 100 lbs., write for prices.

JAPANESE MILLET-Is of recent introduction, great claims are made for it as to productiveness and value great claims are made for it as to productiveness and value as a forage plant. Its introducers say that it is a marvelous grower and luxuriant stooler. Recommended highly for feeding dairy cattle, young stock and sheep, being very rich in nutritious elements. Grows from four to seven feet tall, but is not harsh and woody, as other grasses are. In some sections of the country it is known as Barnyard Millet, while in other parts of the country it been erroneously introduced under the name of Billion Dollar Grass by some seed houses. In spite of these names it is such a good thing that it has come to stay, and will live long in the public favor under its proper name, Japanese Millet. Per lb., postpaid, 20c; 100 lbs., write for prices.

Dwarf Essex Rape

Main standby of the English farmer in raising choice mutton. Perfectly hardy, and of remarkable fattening properties. Easily grown. One acre will pasture 36 head two months, and lambs will make a gain of from 8 to 12 pounds per month. Pigs and cattle are also extremely fond of it. A very rank grower and bears heavy manuring and high cultivation. Sow at intervals of several weeks and secure a supply of good feed. Sow in June. Rape should



be fed in August, though if a first crop be cut about four inches from the ground an after-growth would be useful later. For breeding flocks a piece should be sown first week in July or later. Does well sown with oats. If soil week in July or later. Does well sown with oats. If soil is rich and clean sow broadcast, otherwise in drills and a small patch to feed green to growing chicks. Can be sown on wheat stubble, furnishing excellent pasture late in the fall. Broadcasted it takes 8 to 19 pounds to the acre. Lb., 25c postpaid. express or freight; 10 lbs., \$1.09; 100 lbs., write for prices.

THOUSAND HEADED KALE

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by Agricultural Colleges and Government Stations. Postpaid, oz., 10c; 1/4 lb., 20c; lb., 60c.

Egyptian Corn

Also Called Jerusalem Corn or Dhoura

Also Called Jerusalem Corn or Dhoura
One of the non-saccharine sorghums, requiring the same
growing conditions. Succeeds well in dry sections. Producing small heads on side shoots up to eight on a stalk,
the seed is larger than Kaffir corn. Yield is heavy. Makes
fine chicken feed. Plant three pounds per acre. White,
per lb., postpaid, 20c.

Kaffir Corn

An excellent fodder plant, yielding a large crop of fodder An excellent fodder plant, yielding a large crop of fodder during a season. Grows four to five feet high: upright stalk, with numerous large leaves. Greatly relished by cattle and horses. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. It does best sown in drills three feet apart, using six to eight pounds of seed per acre. Per lb., postpaid, 20c; 10 lbs., 60c; 100 lbs., \$4.00.

Broom Corn, Improved Evergreen

This is the most popular variety of broom corn to grow for the market, the brush being firm and of good length, and retaining the light green coloring when properly cured. Per lb., postpaid, 20c.

Milo Maize

This is one of the sorghums similar to Kaffir corn. Grows erect, with thick, close-jointed stalk. Height, 4 to 7 feet. Heads are very large, giving a heavy grain yield; is drouth resistant, and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 pounds per acre. Price, per lb. rectaried 2006. lb., postpaid, 20c.

Sugar Cane, Early Amber

The high value of northern grown sugar cane for fodder and ensilage is becoming rapidly known. It may be made to furnish the principal food for cattle and horses from August until the following spring. When fed down young as a pasture it grows rapidly again. It also withstands severe drouth with the best of this kind of plants. As a The Early Amber is the best variety for sugar, and it matures quickly. Per lb., postpaid, 20c; express or freight; 10 lbs., \$1.00; 100 lbs., \$6.00.

Sunflower, Mammoth Russian

The largest and most productive variety. Heads often 12 to 20 inches across. Every farmer should plant a few rows at least. It makes one of the very best of foods for poultry; a great egg producer. One 1b., postpaid, 25c.

Canada Field Peas

CANADA FIELD PEAS—This pea is adapted to cultivation in Washington, Oregon and British Columbia. This should be sown in the early spring, at the same time as should be sown in the early spring, at the same time as grain, using from one to one and a half bushels of peas and an equal quantity of either wheat or oats or barley. The crop is ready to cut for hay when the dominant variety in the mixture is nearly ripe. If there are more peas than grain, then the yellowing of the peas and poos marks the time for cutting, or if the grain exceeds the peas, then the crop should be cut when the grain is in the dough stage. Per lb., postpaid, 20c; 100 lbs., 34.00.

Vetches

SPRING — A pealike plant grown tensively in England and to a consider-able extent in Can-ada, for stock feed-ing, but not as much used in the United States as it should States as it should be. Culture same as field grown and cowpeas. Per lb., 20c postpaid; 109 lbs., write for prices.

WINTER, SAND OR HAIRY VETCH (Vicia Villosa)— This is a very valuable forage plant—and becoming more popular every year. It belongs to the pea family, but the vines much longer and the foliage more abundant — it im-proves the soil, be-ing a great nitrogen gatherer. It is an annual. but drops its seeds freely and vill come up year after year year on the same ground. Then can the same be plowed under same as cow peas-



same as cow peas—
it is advisable to
sow oats, barley of
rye, etc., with Vetch which serves as a support for the
plants. It succeeds on almost any soil and should not
winter kill. A sowing in August or September covers the
ground before winter and prevents washing during the
winter and early spring. Can also be sown in April and
will be ready to cut by the middle of July, the second
growth affording excellent hog pasture during the summer.
The yield of forage varies from ten to fifteen zons per acre,
equal to three or four tons when cured as dry hay. Would
suggest sowing about 30 pounds to acre. Per lb., postpaid,
30c; 100 lbs., write for prices.

For Broadcast Seeders, see Page 43



ommended by experiment stations and others for all soils. We are not inclined to agree in this. Its habit of growth is so vigorous that on heavy soils it is likely to lodge. For light soils it has no superior.

Price, per 100 lbs., \$2.50.

We can also furnish other standard varieties of oats. When ready to buy write for prices.

Wheat-Spring

BLUESTEM-A remarkable, semi-hard spring wheat, yielding large crops, free from rust. The millers here pay more for it than for any other sort. It is fully for any other sort. It is fully equal to the old Fife Wheat, and yields a very much larger crop. It is now the main crop in the

milling kings use it for their leading grade of flour. It has been the most reliable variety year after year, yielding a good crop when other kinds failed. One of the best

varieties for hay.

Seed Grains

SONORA-Light colored small kernel, medium hard. A variety much used for breakfast foods.

GOOD SEEDS MAKE GOOD CROPS. It pays to spend a little money on good seeds rather than to try to save a few dollars by using inferior ones and lose many more on the crops. If you can raise 25 bushels of oats per acre without loss, and if you get 50 bushels per acre, the extra 25 bushels is all profit, less a dollar or two extra which you may have spent on seed, etc. One crop pays well while the other pays nothing. If your Oats are light, have small kernels, and are affected with smut, don't sow them. Get some that are better, and will yield a profit. If your Corn has small ears and small kernels and does not yield good big crops, don't plant it. Get the best. Be satisfied with nothing else.

OUR SEEDS ARE BETTER than common seeds. With the latest improved power machines for cleaning and grading seed grain and by the scientific treatment of our seed to prevent smut and other diseases, we are able to furnish much better seed than it is possible for most farmers to produce. It costs a litte more, of course, but the extra cost is nothing compared with the increased yield and quality of the crops.

Recleaned Wheat-Winter

JONES FIFE-A medium hard red variety, less likely to shell than many.

MARTIN AMBER-Medium light kernel, much used for hay and cereal foods.

GOLD COIN-Light colored grain, very hardy and a good

Rye

Rye is a valuable and very hardy crop producing green fodder either in the early spring or late fall. It is considered preferable to wheat because it is harder and protects the young grass, matures before other crops come in and can be sown on soil too poor for other cereals.

SPRING RYE-Spring Rye is an excellent catch crop where winter grain has been killed out, or for sowing where a fall crop has not been planted. If desired it can be turned under and made to answer a good purpose in adding to the fertility of the soil. We call particular attention to the fact that we offer genuine Spring Rye. Many have been disappointed in receiving Winter Rye as a spring variety, and we wish to emphasize the fact that we sell the Genuine Spring Rye, sown in spring and harvested the same season. We now offer an extra fine grade and to insure receiving all your requirements we advise placing your order early. 100 lbs., \$2.25.

WINTER RYE-The value of Winter Rye is becoming more apparent every year. It is much hardier than wheat and can be grown on a greater variety of soils, even on soil that would not produce a fair crop of wheat. It will thrive even in dry seasons and on light sandy loam. It is grown not only for grain, but for fodder and soiling purposes also. When sown in the autumn it starts up very early in the spring and is ready to cut or pasture when about six inches high. It is often plowed under at this stage of its growth as it is then in condition to add great fertility to the soil. Rye does not exhaust the soil as do other grains and can be cultivated longer on the same land than any other crop on the farm. 100 lbs., \$2.25.

Barley

BEARDLESS BARLEY—Very early and free from beards; handles as easily as Oats, making a stronger feed. Makes magnificent hay for work horses. Sow as early as you can; frost will not hurt it. 100 lbs., \$2.25.

WINTER BARLEY-This is a bearded variety that was white Barrier in six a bearded variety that was introduced in this vicinity two or three years ago. We are slow to offer new varieties, but this has proven so valuable an addition to our grains that in some sections all other varieties are being discarded. We have made arrangements for and expect to be able to supply this in any quantity for fall seeding. Price, 100 lbs., \$2.50.

Speltz or Emmer

SPELTZ OR EMMER—The valuable new grain from Russia. It is readily eaten by all kinds of stock, and has shown itself to be especially adapted when fed to milch cows. It is better to mix it, however, with bran and shorts, as it is a pretty heavy feed when fed alone. As a swine feed, we think very well of it, indeed, especially for breed sows. Horses do well on it, but I do not think it is equal to oats in that case. Its most striking value is found in the fact of its drouth-resisting qualities. The United States Department of Agriculture has issued a bul-United States Department of Agriculture has issued a bulletin on Speltz, commending it highly, and the introductory paragraph of that bulletin states:

"The extremely variable climatic conditions in some of

our western states have made it desirable to give particular

attention to crops resistant especially to cold and drouth. Among such crops Emmer holds high rank and should become one of the prominent crops for stock feeding." Price, 100 lbs., \$3.00.

Flax Seed

RECLEANED FOR PLANTING-Per lb., postpaid, 20c; 100 lbs., write for prices.

GROUND FLAX-For medicinal uses. Per lb., 15c; 100 lbs., write for prices.

OIL MEAL—For feed purposes. 120-lb. sks., \$3.60 per sk. Special prices in quantity.

Kill the Smut in Your Grain

If there is smut in your wheat seed destroy the smut and persist in it; you should also insist that your neighboring wheat growers endeavor to destroy the smut. This trouble is becoming very prevalent. Smut must be destroyed if wheat is to keep up its high grade of milling

Remedies for Smut

BLUESTONE-Market price. Use 1 lb, to 5 bu, grain. FORMALDEHYDE-One-lb. bottle, 40c. Use 1 lb. for 40 to 50 gallons of water.

FERTILIZERS

Most soils in the State of Washington are yet fairly new. Their native or virgin fertility is not yet exhausted. There are, however, many different types of soils in the state, some of which do not naturally contain very large supplies of the different elements of plant food needed by crops. Such soils are likely soon to "run out" and need application of fertilizers carrying the particular elements in which they are deficient. Other soils which carry fairly good supplies of different elements of plant food have been improperly handled or wastefully cropped until badly out for difficient. improperly handled or wastefully cropped until badly out of condition. These can best be restored to or built up in fertility by the use of fertilizers to stimulate increased growth until the soils can be properly brought back into good condition. Fertilizers may therefore, be used for two separate purposes; namely, the application of some one or more single elements of fertility to crrect deficiencies in those particular elements or the application of a complete mixed fertilizer to stimulate crop growth.

in those particular elements or the application of a complete mixed fertilizer to stimulate crop growth.

The only possible means of determining whether fertilizers for either of these purposes can be profitably used is by field experiments. A chemical analysis of the soil indicates the total amounts of plant food which are present but does not show how much of this is available for use of different crops, nor does it prove whether the use of any given fertilizer would yield enough increase in crop growth to pay for the cost of the fertilizer. Field trials with fertilizers are, therefore, the only conclusive evidence with fertilizers are, therefore, the only conclusive evidence of their value.

Complete Fertilizers

Complete Fertilizers are those containing correct proportions of all of the essential plant foods, viz.: Nitrogen, Phosphoric Acid and Potash. Different crops require different proportions of these plant foods, and for convenience and best results to our customers we mix fertilizers, individually, but unless the farmer has made a study of the subject, experimented, and knows exactly what his soft requires, better results will be obtained by using the complete mixed fertilizers. plete mixed fertilizers.

Clover Leaf Vegetable Fertilizer

A Complete Fertilizer for All Garden Crops

For general use whehe any one thing is not planted extensively, we prepare this formula containing an average percentage of each of the three plant food elements which combine to make all vegetation, to give the best results on the great majority of crops in all varieties of soils. Con-sequently it is the most satisfactory and economical fer-tilizer for the truck gardener and for the home vegetable

At the rate of 600 to 800 lbs. to the acre would be a fair dressing, and would be equal in fertilizing value to about eight tons of ordinary stable manure. It is free from the millions of weed seeds invariably found in stable

Like other Complete Fertilizers, it may be sown broadcast on the plowed ground, and harrowed in, before planting; or it may be drilled in close to the rows of seeds or plants after seeding or during the early growing season. Price, 100 lbs., \$2.25; ton, \$40.00.

Chemical Fertilizers

Chemical Fertilizers contain only the one chemical, and are consequently not complete fertilizers. They produce wonderful results when properly used, but you should experiment and study the matter carefully before investing in large quantities. Many persons know only of Superphosphate as a commercial fertilizer, and apply it promiseuously on any soil or crop, and, if it does not produce the desired results, condemn commercial fertilizers in general

Most soils contain sufficient quantities of one or two of Most solls contain sumctent quantities of one or two of the three ingredients necessary for fertility. in which case, if by experimenting, you have ascertained what is lacking, it is only necessary to add that which is lacking. It is often advisable to use stable manure, or to plow under a green manure crop, and then apply chemical fertilizers to balance the chemicals which the manure contains in insufficient quantities.

Super-Phosphate

This is what is known as Acid Phosphate, being Phos-This is what is known as Acid Phosphate, being Phosphate rock treated with acid to make the Phosphoric Acid available. While the Phosphoric Acid in this is not so valuable as that in Bone Meal, it is more quickly available, and for that reason is sometimes more useful. It contains 20 per cent Phosphoric Acid, and is generally used at the rate of 500 lbs. to 1,000 lbs. per acre. Price per lb., 5c; 100 lbs., \$1.65; ton, \$29.00.

For Book on Fertilizing and Fertility of Soils, see Page 74.

Nitrate of Soda

Contains 13 per cent Nitrate, in quickly available form. Nitrate of Soda is principally used for a top dressing and should not be used in general fertilizing as it is too free. After an application of Nitrate of Soda results will be seen within twenty-four hours and all the benefits will be had from the fertilizer within two or three weeks. It is used for forcing crops like lettuce, celery, etc., as it makes a large growth of leaves and tops.

Apply the Nitrate of Soda by broadcasting it evenly over the entire surface of the vegetable field you are fertilizing, at the rate of 200 pounds per acre, before seeding, or planting, or transplanting.

As Nitrate is a powerful plant tonic and energizer—it is not a stimulant in any sense of the word—a very small quantity does a very large amount of work. The quantity to be used per acre, although small, will be adequate to make a very striking increase in the amount of vegetables produced. A tablespoonful of Nitrate of Soda in three gallons of water, soaked in the ground around the roots once a week, will keep destructive bugs from growing vegetables. Price, per 100 lbs., \$37.75; 1,000 lbs., \$37.00.

Muriate of Potash

Put up in 225-pound bags. Contains 50 per cent Potash. The fertilizer is especially valuable in Western Washington and the Willamette Valley, as Potash is a plant food that is deficient. Use about one sack to the acre. Price, per 100 lbs., \$3.75; 225-lb. bags, \$7.50.

Sulphate of Potash

Put up in 225-pound bags. Contains 50 per cent Available Potash. This is similar to Muriate of Potash buf is free from chlorides, and can be used to advantage in some instances where the muriate can not be used. Advise all customers to send to us for a book on Potash Sults. Tells the difference between the various kinds and where each one is most available. Use about one sack to the acre. Price, per 100 lbs., \$4.00; 225-1. bags, \$8.25.

Kainit

Is a crude salt; that is, it has not been refined or manufactured, other than being ground into a condition ready for application as a fertilizer. It is sold under a guarantee of 12.4 actual Potash and contains Potash both in the forms of Sulphate and Muriate. It contains Salts of Magnesia and also common Salt. Kainit can be used upon the crops for which Muriate of Potash is recommended. Price, per 100 lbs., \$2.00; 225-lb. bags, \$3.50.

Land Plaster, or Gypsum

Made from pure Gypsum, absolutely free from clay or other foreign matter. This is especially valuable for clover and grass crops. Per 100 lbs., \$1.00.

ANIMAL FERTILIZERS

Animal Fertilizers, being made from animal matter, add warmth and life to the soil. Most of them contain both Nitrogen and Phosphoric Acid, but do not contain Potash, so that to make them complete, it is necessary to add the correct proportion of chemical fertilizers.

Bone Meal

This contains 3 per cent Nitrogen and 22 per cent Phosphoric Acid. Bone Meal is the basis of almost all fertilizers and is probably the cheapest and most valuable fertilizer that we have. It is slower in action, but will not dissolve and waste in the soil, as the plant food contained in the Bone Meal is released only as fast as the roots of the plants take it up. Our Bone Meal is all made from the fresh bone, which contains all of the Phosphate. Price, per 100 lbs., \$2.50; ton, \$45.00.

TANKAGE

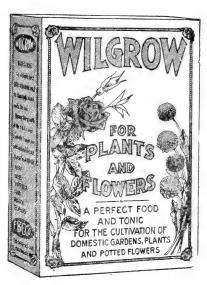
This is a slaughter-house product composed of meat scraps, hoofs, tendon, bne, etc. These are ground into a fine meal, having but little odor and serves as a useful carrier of both Nitrogen and Phosphoric Acid. The analysis shows 5 to 7 per cent Nitrogen and 12 to 15 per cent Phosphoric Acid. Per 100 lbs., \$1.50; ton, \$25.00.

Blood Meal

Pure blood, cooked, dried and finely ground. A quick-acting fertilizer analyzing very high in effective Nitrogen; in fact, the Nitrogen of Dried Blood is one of the most effective forms of organic Nitrogen known. This also carries sme Phosphorous; is a strong fertilizer. a little going a long way. Per 100 lbs., \$3.00; ton, \$45.00.

Wilgrow

The perfect concentrated fish fertilizer for the house garden, flower garden, fruit orchard, vegetable field, lawn, nursery, hothouse and potted plants. Weight 1½ lbs. Price, 25c.



For a combined Hill and Drill Seeder and Fertilizer, see Page 40.

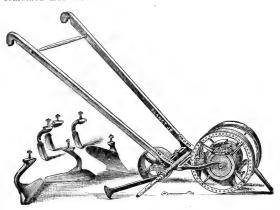
For Book on Fertilizers, see Page 74.

Farm and Garden Tools

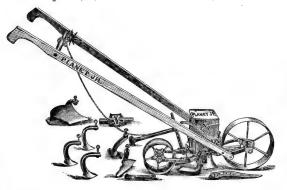
Space will not permit our showing and describing all of the "Planet Jr" Tools, but we will send a full illustrated catalog free for the asking to any one desiring it, and we can supply promptly anything ordered. "Planet Jr." goods are standard machines, the best on the market. In sending your orders to us you can rely on getting bottom prices.

No. 1, Planet Jr. Combined Drill Seeder, Wheel Hoe, Cultivator and Plow. Price, Complete, \$11.00.

This tool is known and used the world over, and excepting our hill and drill seeders, is the most perfect drill known. The hopper holds three pints, and sows in an even, regular stream, whether there is much or little seed in it. The machine is extremely simple, has no agitators, in it. The machine is extremely simple, has no agriculture, belts or gearing, and will not injure any seed. From a drill it is changed to its other uses by removing two bolts, when hoes, cultivator teeth or plows can be quickly attached. It is a practical everyday time and labor saver, a grand remedy for the backache, and the best low priced combined machine on the market.



Planet Jr. No. 4, Combined Seed Drill, Single Wheel Hoe, Cultivator and Plow. Price, Complete, \$12.50. Seeder only, \$10.50.

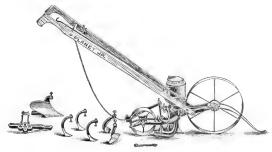


This is the most popular combined tool made. It combines in a single implement, a first-class, hill-dropping seeder, a single wheel hoe or weeder, a cultivator and a plow. The hopper holds two quarts of seed, which can be sown in continuous rows, or dropped in hills at 4, 6, 8, 12 or 24 inches apart.

The drill is detached and the tool frame substituted by removing but one bolt. It then becomes a single wheel hoe. It is useful almost every day of the season, at every stage of the garden work. With this one implement the small farmer can do practically all the work in his small crops.

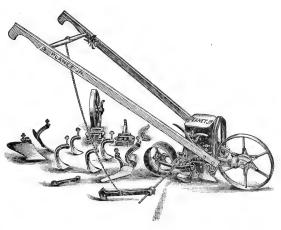
crops.

No. 6. Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow. Price, \$15.00.



This, our latest Planet Jr. Seeder, has been under construction for two years past, and has been held back until every detail has been made as nearly perfect as possible. The steel corrying wheel is 16¹⁴ inches high, with forged steel spokes, making an easy running 2001. Handles adjustable. The feed and cut-off are the most constructed. The opening is the property of the constructed of the opening is the state of the constructed of the opening is the construction of t with forged steel spokes, making an easy running 1901. Handles adjustable. The feed and cut-off are the most accurate we have ever constructed. The opening phow is of a new shape, leaving the seed in a narrower row than any plow we have heretofore made. The roller is large and wide, leaving the seed in excellent condition for germination. This drill sows in drills, drops in hills 4. 6, 8. 12 or 24 inches apart, covers, rolls down and marks the next row, all in one passage. As a wheel here the frame is similar to our No. 17 Single Wheel Hoe and equipped with the same tools. The combination is the best and most useful we have ever offered.

Planet Jr. No. 25, Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow. Price, \$15.00.

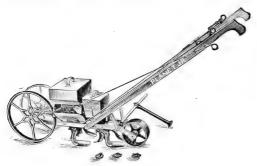


This new combined machine is intended for gardeners who have a large enough acreage in crops for a double wheel hoe to be used to good advantage, and prefer not to buy separate machines.

As a drill it is almost identical with the Planet Jr. No. 4 Drill, and is thoroughly substantial and accurate in sowing all kinds of garden seeds in hills or drills.

As a wheel hoe it is identical with the Planet Jr. No. 12 Double Wheel Hoe, the very best machine on the market. The change from drill to wheel hoe takes but a moment and the whole combination is one we can heartily recommend and guarantee satisfactory.

No. 21, Combined Hill and Drill Seeder and Fertilizer. Price. \$22.00.



No. 21 has been much improved for 1913 and meets the demand for a drill to sow seed and fertilizers at the same time. This tool may be used to sow seed only, in either hills or drills, as desired; or to sow fertilizer only; or to sow both together. Its work is equally perfect when used in any of these ways. It sows all garden seeds in hills, 4, 6, 8, 12 or 24 inches apart, or in drills, and also fertilizer, placing it above or below the seed as desired. The quantity is regulated by our patent feed rod and index at the top of the handle. The seed hopper holds 2 quarts; the fertilizer hopper 4 quarts.

No. 21 is gradually growing in popularity and the demand indicates satisfaction given.

While performing a double service, it does not run too

While performing a double service, it does not run too hard for the work accomplished. The parts are galvanized and the whole get-up is a desirable one. Packed weight, 94 lbs.

Planet Jr. No. 12, Double Wheel Hoe, Cultivator and Plow. Price, \$8.00.

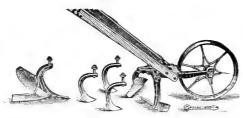


Two acres a day can be easily worked with this implement, and when it is done it will be a better job than three men could have done with hand hoes. The No. 12 runs either astride or between the rows: kills all the weeds and leaves the earth in fine shape. Then, too, it's so easy to work. Twelve-year-old girls work gardens with

them with ease and success.

The No. 12 has a pair of 6-inch hoes, a pair of plows for opening or covering, and a set of four all-steel caltivator teeth. The tools shown are what gardeners use most and others can be added as wanted.

Planet Jr. No. 17, Single Wheel Hoe, Cultivator and Plow. Price, \$6.00.



For easy gardening and at the same time clean and perfect gardening, the kind that will make your garden the talk of the neighborhood, and cause your face to glow with honest pride, nothing is quite the equal of this No. 1 Wheel Hoe. It is suited to all kinds of garden caltivation and all garden crops. You can do more and better hoeing with it in one day than you can do in three days

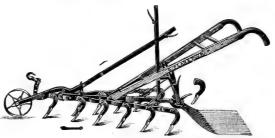
with a hand hoeo. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

Other attachments can be added at any time.



This is the greatest cultivating tool in the world for the onion and the sugar beet grower, and also for every grower of garden crops from drilled seed. They can do grower of garden crops from drilled seed. They can do more work and do it better and easier than can possibly be done in any other day. One pair 6-inch hoes, one pair 4i-nch hoes, two pairs hollow steel cultivator teeth, one pair plows, two 3-tooth rakes, two 5-tooth rakes, and two leaf lifters. Packed weight, 37 lbs. Price, with attachments as in cut, \$10.25.

Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer. Price, Complete, \$11.00; with Pulverizer, \$9.10; without Wheel or Pulverizer, \$7.80.



Gardeners cultivate better than formerly. It has been found to pay best. The farmer or gardener is most likely to cultivate best who has the tool best adapted to his purposes. With the 12-tooth harrow here shown you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers market gara special favorite with strawberry growers, market gardeners and truckers.

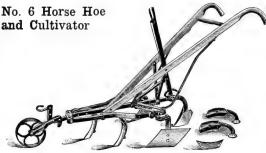


This tool is without question the most practical omplete combined garden tool ever offered the public—the ease and simplicity of adjustment, the lightness combined with great strength, the accuracy by which it drills or hills the seed, and the small amount of power required to operate it, are the important features. The wheel is made of steel, 16 inches high, the frame of pipe, coupled made of steel, to inches light, the frame of pipe, coupled to malleable castings. In each form, whether a seed drill, a double wheel hoe, or a single wheel hoe, it is equal to any tool or tools made especially for the one purpose. It places the seed in drills or in hills as at 4, 6, 8, 12 or 24 inches apart. Complete as in cut. Price, \$12.50. Onion Set Harvester. Price, \$1.25. Weight,

 $1\frac{1}{2}$ lbs.

A useful attachment for our combined drills and all our wheel hoes. Eight-inch size for onions and onion sets. It leaves the crop in the best condition for easy handling.





We recommend to all of our customers as being one of the best tools made. Price, as in cut, \$7.00.

"Standard" Garden Plow



The adjustment is the handiest and most perfect ever put on a tool of this kind and is adjusted up and down by loosening a thumb nut at the top of the shank, as shown in cut, and may be done without removing the plow from the ground. Wheel 24 inches in diameter, held by double pattern frame of very stiff steel. The handles are adjusted by the same thumb nut without interfering with the plow adjustment. These are the bent style handle both at the upper and lower ends making a neat fit at the axle and having good hand holds at the upper end. The attachments furnished with this tool are of the best quality and shape ever offered. The new hoe or sweep is a great improvement over the other styles, scours well and does excellent work, cutting ten inches. The turning plow is the right shape to scour and run easily with no side draft. The new five-tooth rake cultivator is fine for all small plants and stirs the ground thoroughly, having wide shovel points. Price, with attachments as shown, \$4.00.

Garden Trowels



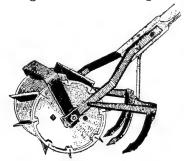
A good steel trowel. Price, 35c; postpaid, 50c.

Cronk's Cultivator Hoes



Two prongs are changeable for rows of any width. Loosening nuts, releases the prong. Works between rows or center prong can be removed and rows straddled. A perfect weeder and pulverizer, giving level cultivation. Removing center prong and reversing other four makes Potato Digger. Head made entirely of steel. Light. well made, serviceable. Blue finish, 41-3 foot handle. Price, \$1.00.

The Right Tool in the Right Place



The Barker Weeder and Mulcher

This cultivator is built on the plan of a lawn mower, runs like a lawn mower and cuts weeds like a mower cuts grass. It cuts the weeds that are under the ground as well as those on top of the ground, thus doing away with two or three crops of weeds at one and the same time. The mulching and cultivating of the soil serves a two-fold purpose as it breaks up the capillary and prevents the moisture from evaporating. It also keeps the surface in such a condition that it readily takes the surplus water in as it falls. Price, \$3.50.





It is very conveniently used, and fits the hand so comfortably that the fingers are entirely free for use wherever necessary. Net price, 25c; postpaid, 30c.

Master's Rapid Plant Setter

The only hand mechanical plant setter on the market. It is built on scientific principles throughout. The conical jaws are made of heavy sheet steel and the main body or water reservoir and plant tube of heavy tinned ulate. The water valve is of brass with rubber packing. The valve rod and trip springs are of steel wire. The machine is well put together with rivets and solder and should last for years.

Plants are set in water or liquid manure and covered at one operation. Plants may be safely set out in hot, dry weather. Sets cabbage, cauliflower, tomatoes, sweet potatoes, sugar beets, etc., much more rapidly than by hand and with much less loss of plants. The plant setter has a record of more than 998 plants to grow out of each 1,000 set.

Any man can easily learn to set from 2.000 to 10.000 plants per day.

This system of planting is recommended as proof against cutworms. Weight, crated for shipmeht, 7½ lbs. Price, \$4.00.

Potato Planters

EUREKA-This is the lightest and best tubular planter made. With this planter one man can plant several times as much ground without getting a lame back as he can plant by hand. The planter locks itself as it is lifted out of the ground, so that the next potato may be dropped in at once and opens automatically as the top of it is moved forward in walking. Price, \$1.25.

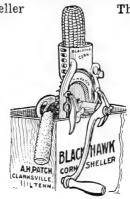


PINGREE, OR ACME—Is practically the same as the Eurcka without the tube down the handle. You lift and drop the potato in the lower part. It is light and a very satisfactory planter. Price, \$1.00.

"Lightning" Grass Trimming Shears

For trimming ground, flower beds, etc. Weight, 1 lb. Each, 50c.





It can be set to shell any corn that grows. Set it for popcorn and it will shell popcorn; set it for field corn and it will shell field corn; set it for the largest corn that grows and it will shell the largest corn that grows. That is why it is so much better than other types. Made with ball-bearings, obviating the expense of a heavy balance wheel. Easily fastened to box by thumb-screws—no bolts nor screws required—no holes to be bored. Price, \$2.50.

CORN PLANTERS

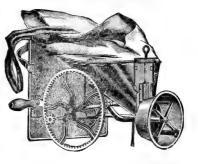
SEGMENT CORN PLANTER—The seed pocket can be suir-ficiently enlarged to perfectly adapt it for planting the largest field beans as well as corn. The slide is an arc of a circle having its center where the jaws are pivoted together. In other words, the pivots on which the jaws open and shut are the hub of a wheel of which the slide is a part of the rim. There is consequently no friction nor lost motion. Price, \$1.25.

THE ECLIPSE RCTARY
CORN PLANTER—Decidedly
the best hand corn planter
made and a very desirable im
plement for those who have a
quantity of corn to plant. It
puts the corn exactly where you
want it, and at a proper depth.
It is easily worked and a moss
satisfactory tool in every way.
Price, \$1.25.

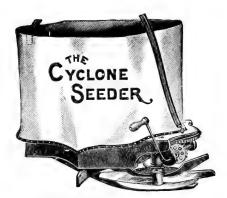
TRIUMPH CORN PLANT-ER—Has no objectionable features; is made of good material. Has Iron Seed Box and Iron Channel: foot of polished steel, strong, durable, and gives universal satisfaction. Price, \$1.00.



Broadcast Seed Sowers



IMPROVED CAHOON—This is probably the most popular broadcast sower on the market. They have a force feed and throw the seed from 15 to 36 feet, according to the seed that is being sown. Price, \$3.50.



The New Cyclone Seeder

Will sow timothy, clover, oats, red top, turnip, millet, corn, cotton, and all other grains and seeds perfectly even and any desired amount to the acre, and from 40 to 60 acres a day. Price, \$2.00. Weight, $3\frac{1}{2}$ lbs.

The Greatest Exterminator of All Animals That Burrow in the Ground

The Chemical Squirrel Tube is endorsed by the Pullman College and Moscow Univrsity.

DIRECTIONS FOR USE—The chemical used is carbon sulphide. Fill tube two-thirds full of old sacks or any kind of waste, saturate with chemical, and blow fumes in the hole.

THE CHEMICAL SQUIRREL TUBE



DO NOT LIGHT, AS IT WILL EXPLODE-For smoking, old sacks or dry manure has no equal. With about one pint of sulphur to each load this can be used with very little cost to the farmer.

Fifty cents' worth of sulphur will clean 100 acres of badly infested land.

Fill in all holes that smoke escapes from. If directions are followed success is sure.

Price, \$10.00.

DE LAVAL CREAM SEPARATORS



Skim cleanest, turn easiest easiest to wash, simplest in construction, last the longest.

The De Laval was the first cream separator in 1878 and it has been first ever since.

More De Lavals are in use than all other makes combined. 98 per cent of the world's creameries use the De Laval exclusively.

The machine that is best for the creameryman is best for the dairyman.

De Laval hand-size machines range in capacity from 1,350 to 135 pounds per hour and in price from \$160 to \$35—seven sizes.

The De Laval is by far the most economical cream separator and always give satisfaction.

If you expect to buy a cream separator send for the latest De Laval catalog, explaining in detail the construction and points of superiority of De Lavat machines, or, better still, let us set up a De Laval for you on your own place and give the machine a trial.

Separator Oil

Price: 1/2 gallon, 55c; gallon, 75c.

Dairy Thermometers

Price, 35c; postpaid, 45c.

How to make the Dairy Business pay?

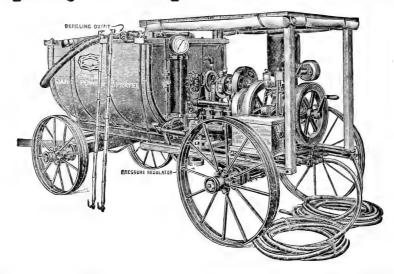
Have a good pasture for your cows in the summer, with good water.

Build a Silo and fill it with ensilage corn for Winter.

Have a warm, well-kept stable.

Buy a De Laval Cream Separator.

Spray Pumps and Material



BEAN GIANT TRIPLEX

The Bean Giant Triplex is the most perfect, complete, and thoroughly efficient high-pressure power sprayer ever offered to the fruit grower. Every detail of material, construction, and workmanship is of the highest grade obtainable. It is the result of thirty years of sprayer building.

The Giant Three-Cylinder Pump

Fitted with porcelain-lined cylinders. This pump has a capacity of 8 to 11 gallons a minute. The bell metal ball valves can be reached in ten seconds. These valves operate on reversible brass seats that can be easily turned over when worn on one side, and replaced when worn on both.

The Bean Pressure Regulator

A method of pressure control that does away entirely with all relief valve troubles. Simple, durable, automatic. Absolutely sure. Saves wear on engine; saves wear on pump; saves gasoline.

The Bean Refiller

Fills the tank in five minutes. Simple, sure, thoroughly satisfactory. There is not a movable part to the Beau refiller. All that is necessary to fill the tank is to shut of nozzles, throw suction hose into the tank of liquid or into the ditch or stream, and turn on the ¾ inch cut-off.

Other Bean Giant Features

Direct Connected Agitator—Insures positive and thorough agitation of solution.

Truck—Low down. Mounted on axles direct. Fourinch depressed tires. Capacity of 4,000 pounds.

Platform—Steel, reinforced, one-piece continuous, assuring absolute rigidity.

Outfit furnished with 2½ H. P. or 4 H. P. Sprayer Engine; 100 feet of Bean Spray Hose in 50-foot lengths; Hinged Wood Cover with Canvas Sides, etc. See our catalog.

For Complete Description and Prices Write for Catalog

BEAN JUNIOR NO. 1



Good Capacity; Low in Price

Owners of small orchards who desire high pressure with economy will find the Bean Junior a thoroughly reliable, efficient and inexpensive pump.

Many Advantages Over Barrel Pumps

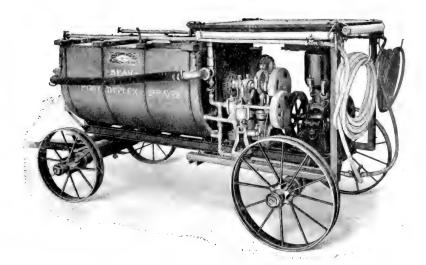
It supplies a large amount of air to the receptacle, making the pump easier to operate, the pressure uniform and the spraying more effective. In a barrel pump no air can be supplied except that naturally in the air chamber, which works out during the day and leaves no air cushion in the pump.

Price List

OUTFIT 211—Junior No. 1 Pump, on platform, with pressure gauge, suction hose, strainer, and single cut-off, \$27.00.

OUTFIT 212—Junior No. 1 Pump, on platform, with pressure gauge, suction hose, strainer, single cut-off and one 8-foot bamboo extension, with nozzle and cut-off, \$29.00.

COMPLETE OUTFIT 213—Junior No. 1 Pump, on platform, with pressure gauge, suction hose, strainer, single cut-off, one 8-foot bamboo extension, with nozzle and cut-off and 25 feet of our Bean Spray Hose, fitted, \$34.75.



THE BEAN PONY DUPLEX

A new addition to the Bean family this season. For the orchard of moderate size the Bean Pony Duplex will meet all requirements. It has a capacity of 4 % gallons per minute at a guaranteed pressure of 200 to 225 pounds. This outfit is equipped with 2 cylinders, same as the Giant Duplex except that the cylinders on the Pony are slightly smaller, being 21/2 in. size.

Complete Rotary Agitator-Fitted in tank and direct connected to pump.

Steel Platform-Special, narrow, one-piece steel plat-

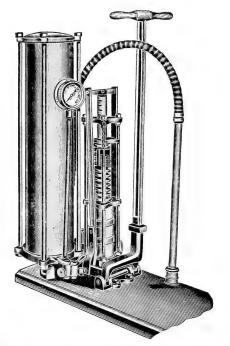
form. Absolutely rigid. All parts are connected up and fastened in position.

Hinged Wood Cover-With canvas sides and end, covering engine and pump. Fitted with hooks for carrying hose and rods.

Engine-11/2 H. P. Sprayer Engine, hopper cooled, with pulley and complete jump spark battery equipment.

Outfit-Fitted with 50 feet of Bean Spray Hose in 25foot lengths, unless otherwise ordered; two 8, 10 or 12 foot aluminum bamboo extensions with 2 nozzles and 2 Extra packing, valve seats, engine springs, etc.

For Complete Description and Prices Write for Catalog



The Magic Spray Pump

THE MAGIC SPRAY PUMP For the Man Who Thinks

Our Magic Pumps represent a principle in construction, originated, patented and controlled by us and found in no other spray pumps.

The advantage of this construction, when the pump is

seen in operation, will be instantly appreciated by every fruit grower who believes in thorough spraying.

It means maintaining the high pressure that is absolutely essential with only two-thirds of the labor necessary

lutely essential with any other pump.

In addition to this overwhelming superiority the Magic

The Rean Stray Pumps are the only ones which and other Bean Spray Pumps are the only one Have non-corrosive porcelain cylinders, 3-inch;

Have no stuffing box or outside packing; Have 51-16 inch bell metal ball valves with reversible and removable seats;

No threads inside the valve: Have a powerful spring, which is so used as to save one-third the labor;

Have few working parts and all of these readily accessible.

Weight 200 pounds.

These and other advantages fully described on the following pages.

Price List Bean Magic No. 9

OUTFIT 181-Magic Pump, on platform, with gauge, double cut-off, suction-hose and strainer, \$41.00.

OUTFIT 182-Magic Pump, on platform, with gauge, double cut-off, suction-hose and strainer, two 8 or 10-foot bamboo extensions with cut-offs and nozzles, \$45.00.

COMPLETE OUTFIT 183-Magic Pump, on platform, with gauge, double cut-off, suction hose and strainer, two 8 or 10-foot bamboo extensions, with cut-offs and nozzles, or 10-foot bamboo extensions, with cut-ons and and two 25-foot lengths of Bean Spray Hose, all fitted,

For aluminum instead of iron pipe in bamboo extensions add for each rod \$1.50.



Our Bean Pippin, No. 50, is especially adapted for use on side hills and very rough ground, because the air chamber is entirely contained within the barrel, so it is almost impossible to tip over.

It also meets the demand for a low-priced, high-class sprayer for small orchards, vineyards or whitewashing jobs

It has an anchor in the bottom of the barrel on which the point of the cylinder rests, which holds it rigidly in position. It is made to fasten in a barrel without a head, so is extremely easy to mount.

OUTFIT 270-Pippin No. 50 Pump, with agitator complete, anchor, hose nipple and bolts ready to fasten to barrel. Price, \$11.00.

OUTFIT 271-Pippin No. 50 Pump, with agitator complete, anchor, hose nipple, bolts ready to fasten to barrel and one 8-foot bamboo extension, with nozzle and cut-off. Price, \$13.00.

COMPLETE OUTFIT 272-Pippin No. 50 Pump, with agitator complete, anchor, hose nipples, bolts ready to fasten to barrel and one 8-foot bamboo extension, with nozzle and cut-off and 20 feet of Barrel Spray Hose fitted. Price. \$16.40.

If desired mounted in barrel add to above prices \$2.25.



Success

The Success Bucket Spray Pump

All Brass Working Parts, with Indestructible Bronze Valves, Indestructible Bronze Valves, Malleable Iron Combination Foot-Rest

Florists, gardeners, fruit growers and farmers who wish a durable, convenient spray pump at a low cost can find nothing better. This outfit is a most excellent one for ordinary use in gardens, vineyards and orchards: for washing windows orchards: for washing windows and buggies and for the application of whitewash. The pump has a large air chamber and is double-acting, throwing a continuous stream either solid or in fine spray. It is provided with Bordeaux nozzle and four feet of discharge hose. Weight 8 lbs. Price, \$4.00.



Does not require constant pumping. Has an automatic thumb lever valve. Most practical for Orchard, Field and Garden Work.

One pumping will expel entire contents of tank and is fficient to spray 2,000 plants. Spraying nozzle may be versed to spray under side of bushes and plants. The one pumping will experientire contents of tank and is sufficient to spray 2,000 plants. Spraying nozzle may be reversed to spray under side of bushes and plants. The Automatic Thumb Lever Valve is at all times under complete control of operator—hence none of the solution is wasted. It saves its cost in making a given amount of compound do so much work. An adjustable shoulder strap and tree attachment with suitable couplings for orchard and tree spraying furnished with each machine. Aluminum finish. Capacity, 3 gallons. Price, \$5.50.

Inland Powder Sprayer



In some sections potato growers, stock and poultry raisers prefer to use Paris Green and disinfectants in powder form mixed with dry plaster. To meet such a demand the "Blow" Sprayer is recommended. It is unnecessary to give the details of the mechanical constructions of the sprayer as we give a positive guarantee with each sprayer that it is impossible to draw powder back into the cylinder pump and if the powder is sifted through a screen and kept absolutely dry it will be impossible for the same to clog. With these features covered the sprayer is sure to give satisfaction. Weight 1% lbs. Price, \$1.00.

Inland Continuous Sprayer



The Inland Continuous Sprayer, as the name implies, is

so constructed that it not only sprays on the downward stroke of the plunger but also when it draws back, thus causing a continuous mist-like spray.

The air chamber measures 1½ inches in diameter by 14 inches long. Has a ¼ inch steel plunger rod: special type plunger. The sprayer is fitted with a 3-16 inch brass ball check really which is positive in its action, and practically check valve which is positive in its action and practically indestructible. The solution tank is made from heavy IX fiv and is so constructed that the sprayer will not tip over when filling. %-inch zinc filler cap. Capacity one quart. Packed 1 dozen in case. Extra tip for spraying upwards, with each machine. Weight 1½ lbs. Price, \$1.00.



Inland Special Sprayer

Inland Special Sprayer is a Single Tube Tin Sprayer. The pump cylinder measures 14½ inches in length by 1¾ inches in diameter.

inches in diameter.

Sprayer is fitted with a ¼-inch steel plunger rod; special type plunger. The special arrangement of the spraying tube is such that it thoroughly breaks up or atomizes all oils and solutions into a fine mist-like spray which penetrates all cracks and crevices. The sprayer is adapted for all kinds of general spraying and is used very extensively for spraying disinfectants, etc. Weight 1½ lbs. Price, 50c.

DUST SPRAYERS

The principle of spraying to control insects and diseases on plant life is right. In practice the principle advocated and taught by our theorists is unsatisfactory, unpleasant, laborious and expensive. Principles and practice go together. The results from practice determines the correctness of the principle. A theory of orchard protection against insects and fungi is of no value until the practical grower has put his O. K. on it. The Dust Spray is championed by the successful practical growers, because it is satisfactory, rapid and easy of application, with a minimum amount of labor, and saves 75 per cent in spraying expenses.

Cyclone

This is our hand power machine. The dust box holds 1 peck of dust, the machine uses 2 12-inch air tube and 8 feet of 2 12-inch spouting, our flexible ischt trand and flexible joint, stand and fixtures, and our book of formu-

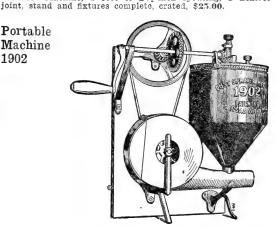
las are rurnished free with each machine.

Capacity — One horse and light wagon, and two men can spray from 25 to 40 acres per day, according to the size of

the trees. Price—Machine, 8 feet of $2^{1}/_{2}$ -inch spouting, 1 flexible

CYCLONE UST SPRAYER MFG. i zeci

Portable Machine 1902



This machine is carried by the operator. The machine and its entire mechanism is securely fastened to a single back piece that is supported close to the body of the operator in front. It is held in position by combined shoulder braces and waist band, adjusted in such a manner as to throw the weight of the machine on the haunches of the operator.

The dust box holds 1 gallon. It has the same feed attachment as the Cyclone, and guaranteed not to choke.

The dust box, air tube, and fan shell are made from gaivanized iron on exactly the same design as the Cyclone. It has $1\frac{1}{2}$ -inch air duct, and 6 feet of $1\frac{1}{2}$ -inch spouting, one flexible joint and one pair of combined shoulder braces with our book of formulas are furnished free with each machine.

Price—Machine, 6 feet of $1\frac{1}{2}$ -inch spouting, 1 flexible joint, and 1 pair combined shoulder braces, all complete and boxed, \$11.00.

PRESSURE GAUGE-Price, \$2.00.

Bordeaux Nozzle

This Bordeaux Nozzle is a new pattern which eliminates the common objections to this type. The handle is built close down to the body and is shapeu so as to avoid catching in the branches. This will be quickly appreciated by all users of this style of nozzle. The weight is also materially reduced without at all reducing the strength. The corners of the slot are cur away leaving plain straight faces which form a clean-cut spray without ragged edges. Price, each, 75c; postpaid, 80c.



Whirlpool Power Nozzle



This has a very large capacity, and makes a pertect cone-shaped spray. This nozzle is built on an angle of 45 degrees, allowing the operator to spray up or down by simply turning the nozzle. Price, each, 75c; postpaid, 80c.

Vermorel Nozzle

The Vermorel Nozzle throws a beautiful, misty, circular spray.

All trouble caused by clogging in the bend is avoided by having the stem detachable. This also allows the nozzle to be turned to any angle desired.

Price, each, 75c; postpaid, 80c.



Double Vermorel Nozzle

Price, each, \$1.40; postpaid, \$1.50.

Triple Vermorel Nozzle

Price, each, \$2.00; postpaid, \$2.10.

Bean Best

"The Unequaled Cyclone Nozzle"

Throws a fine circular spray a long

distance.

Bean Best is a marked improvement on our Cyclone Long Distance Nozzle and furnishes a perfect es a perfect There are no spray. parts to catch on th

limbs, and the nozzle is fitted with a steel cap, which does not cut out easily. A second cap with larger hole is also furnished with each nozzle. Price, each, 75c; postpaid,

Bean Whitewash Nozzle The Old Standby for Whitewashing

The nozzle throws a fine spray or a solid stream. It is particularly recommended for whitewashing and for washing buggies. Thousands of these nozzles are now in use and giving the best of satisfaction. To clean when clogged, turn the thumb screw straight out for an instant. Price, each, 75c; postpaid, 80c.

Spray Hose Coupling



With hexagon nuts and double length shank, so will not pull or blow out

Price, per pair, 55c; postpaid, 60c. Female half only, 30c; postpaid, 35c.

Spray Hose Clamps

Two of these clamps can be used on our long shank couplings and mender.

Price, each, postpaid..... 5c Per dozen, postpaid......50c



Hose Connection

To connect 1/4-inch hose to spray rod. Price, each, 25c; postpaid, 30c. Spray Hose Menders-Each, 20c; postpaid, 25c.



Hose Reducers

These are for connecting a male hose coupling on end of spray hose to the spray rod. The two-piece connection has a swivel joint and is easy to attach. When the one-piece connection is used the entire rod must be turned in screwing on. Price, one-piece reducer. 20c.

1/4 Nozzle Y



The Brass Y shown here will screw on on any spray rod, and all kinds of spray nozzles screw into the other two ends. nozzles screw into the other two ends. This is intended for use when two nozzles on one rod are desired. Price, each, 60c; postpaid, 65c.

Bamboo Extensions

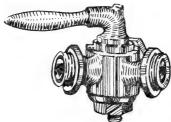


1/4 Nozzle Ell

It is very important to spray down into the blossom. This piece has just the right angle and screws onto the end of any spray rod. Then attach the nozzle. Price, each, 25c; postpaid, 30c.



Three-Way Discharge Cock



This has a large barrel which allows it to cut off absolutely, and eliminates the trouble that has been experienced with in ferior cocks.

Price, each, \$1.50; postpaid, \$1.75.

The bamboo used in making our extension is a nice size to hold in the hands and is smooth and little affected by either heat or cold. We regularly fit them with 1/8-inch iron pipe, but can furnish 1/4-inch iron pipe without extra charge; 1/8-inch pipe is perfectly smooth, does not rust or corrode, and weighs only one pound to ten feet.

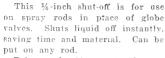
8-goot Bamboo Extension, with iron pipe, \$1.50; with aluminum pipe, \$2.50.

10-foot Bamboo Extensions, with iron pipe, \$1.75; with aluminum pipe, \$3.00.

12 foot Bamboo Extension, with iron pipe, \$1.90; with aluminum pipe, \$3.50.

1/4-inch Extension Pipe Rod only, 5 ft., 60c; 8 ft., 75c; 10 ft., 90c.

Spray Cut-Off



Price, each, 60c; postpaid, 65c.



Bean Ball Rod Cut-Off

The perfect 1/4-inch rod cut-off. Far better than a globe valve for it opens full with less than one turn of handle. Better than any lever cut-off because it will not leak since the ball revolves instead of wearing. Fits any spray rod, Price, postpaid, \$1.10.

Bean Spray Hose



The high pressure and corrosive and oily materials used in spraying are very destructive on ordinary spray hose, and have caused many persons to believe that hose for this purpose cannot be relied upon to last out a season's hard usage. Our Bean Spray Hose is constructed and treated on purpose for this use, and as it saves annoyance, and lasts longer, it is much more economical. Furnished in 25 and 50 foot length, fully guaranteed. Price, with couplings attached, per foot, 23c.

Our Barrel Spray Hose is good, but is for lighter pressure. Price, per foot, 15c.

Hose Washers, 1/2 inch rubber, per doz., 10c.

Spray Materials and Insecticides

The Two Greatest Fruit Tree Sprays For Destroying Insects, Scale, Etc. Lime and Sulphur Solution

Arsenate of Lead

The secret of successful spraying lies in knowing and judging the correct time based on climatic conditions. Certain locations are much warmer and earlier than others; more advanced. Owing to this fact orchardists must watch these conditions and use their judgment as to when to come the different diseases. spray for the different diseases.

Kindly bear in mind this very important fact that thoroughness in spraying is one of the main points. Many failures can be traced to the lack of thoroughness.

It is also important that the orchardist should become familiar with the name and character of the disease he is to spray for. If the disease is not known apply to your inspector for information. Specimens of diseased fruits or leaves, or other portions of trees or plants, may be for warded to your state experiment statin at no cost, where a careful microscopical examination will be made and the disease identified.



LIME AND SULPHUR SOLUTION makes for better fruit. It means a big earning power. It is a true calcium sulphide true calcium sulphide means a periect chemical combination of lime and sulphur, abso-lutely free from all sed-iment, absolute uniformity which guarantees the same identical treatment as to strength and effect tree for tree, and which allows the wash to be applied to delicate bud life, blossom condition and foliage as well as the dorman tree, without injury or setback, both for fungicidal and insecticidal troubles as well as San Jose Scale. Oys-ter Shell Bark Louse,

Moss, Apple and Pear Scab, Slug Words. etc.

The wide range of discesses that fruit trees are subject to that it will control, prove it to be the best general fruit wash the world has any reach of

Directions

For any Scale Insects, or Bark Louse, Moss, Lichens, Green Aphis, or Red Spiders, use one part with ten to twelve parts water; spray when leaves are off the trees.

For Bud Moth, Peach Twig Borer, Woody Aphis, Peach Leaf Curl, Peach Mildew, Apple Mildew, Grape Mildew, use one part to ten or twelve parts of water; spray when buds are swelling.

For Apple Scab and Peach Scab, use one part with fourteen of water; spray just before blossoms open, again as soon as blossoms fall.

For Black Spot Canker, use one part with ten parts water; spray as soon as the leaves fall, repeat in two weeks.

In using as a summer spray, use one part with twenty

Price, gallon, 75c; 5 gallons, \$2.25; case, \$4.25; barrel, \$10.00; for large quantities, write for price.

To All Poultry Raisers

Of Great Importanc—Lime and Sulphur Solution diluted 1 to 5, one gallon to five gallons of water for spraying your poultry house for destroying Lice, Mites and Vermin, will outclass any other product for like purpose on the market, and is sprayed for one-tenth the cost.



The superior qualities of this article as an insecticide are

The superior qualities of this article as an insecticide arc already well known. A few words upon this point, however, may not be out of place.

As the name implies, Arsenate of Lead is a chemical combination of lead and arsenic. The arsenic is the poisoning agent. The lead serves two purposes—it acts as a binder, holding the arsenic upon the foliage and forms a strong chemical union with the arsenic, reducing to the minimum soluble arsenic, which causes foliage injury.

Grasselli Arsenate, of Lead-Paste contains 15 per cent arsenic oxide, combined with the maximum amount of lead consistent, with good mixing analities. It contains less

consistent with good mixing qualities. It contains less than ¾ of 1 per cent soluble arsenic and will not injure the most delicate foliage when used according to directions.

Grasselli Arsenate of Lead

Kills all leaf-eating insects. Does not injury the foliage. Mixes readily with water. Sticks to the foliage.

Kills all leaf-eating insects. Does not injury the foliage. Mixes readily with water. Sticks to the foliage. Grasselli Arsenate of Lead conforms to the most rigid requirements of Nationa and State Laws governing the manufacture and sale of insecticides.

Prices—One lb., 25c; 5 lbs., \$1.10; 10 lbs., \$1.50; 20 lbs., \$2.50; 50 lbs., \$5.50; 100 lbs., \$10.50. Winners of the Capital prize for our National Apple Show for 1908, 1909 and 1910 used Grasselli's Arsenate of Lead

of Lead.

Grasselli Bordeaux Mixture Paste

A fungicide for Potato Blight, Potato Rot. Mildew, Leaf Blight, Cutworms, etc. Before bloom use 1 lb. t gallons of water, after bloom use 1 lb. to 10 gallons. Price, 1-lb. jar, 35c; 5 lbs., \$1.25.

"BLACK LEAF 40" A Concentrated Solution of Nicotene-Sulphate (Poison)

For the convenient information of those desiring to employ "Black Leaf 40" for spraying fruit trees, vegetables, etc., the following suggestions are made:

Against sucking insects, such as Green and Woolly Aphis, Pear Psylla, Grape Leaf Hopper, Pear Thrips, etc., 1 part "Black Leaf 40" to about 900 to 1000 parts water. Against more resistant plant lice, such as Black Aphis and Rosy Apple Aphis, 1 part "Black Leaf 40" to about 500 or 700 parts water. 500 or 700 parts water.

To obtain best results, use strong pressure whenever

To obtain best results, use strong pressure whenever practicable, particularly against insects having a waxy covering, or to penetrate opening buds.

The addition of one or two pounds of any good laundry soap, or of Whale Oil Sap, to each 50 gallons of water is often very advantageous, lessening the formation of drops, and causing the spray to cover surfaces more in the form of a thin film; also to give better penetration. When using, dissolve the soap in the water before adding "Block Leaf 40"."

Price, ½-1b. tin, by express or freight, \$3.25.

Price, ½-1b. tin, by express or freight, \$3.25.

Tobacco Extract

Liquid, free from gum. Destroys plant lice of all kinds. red spiders, sheep ticks, etc. For syringing, dilute 20 times or more with water. The finer the spray, the better. Price, ½ pt., 35c; pt., 60c. Not mailable.

SPRAY CALENDAR

	PEST	PLANT	ATTACKED	WHAT	то	USE	WHEN TO USE.
1	Oyster Shell Bark Louse	Apple, main	ly	Sulphur-lime			When leaves are off the trees
3	San Jose Scale	Nearly all d Fruit trees	eciduous trees and bushes	Sulphur-lime Sulphur-lime			In spring before buds burst In spring before buds burst
4 5	Blister Mite Green Aphis	Apple, pear,	peach, plum,				In spring before buds burst
6	Bud Moth. Peach Worm						In spring before buds burst
7	or Twig Borer Woolly Aphis	All orchard Apple	trees	Sulphur-lime.	ке	rosene	As the buds are swelling
	Black Aphis			Tobacco, or	whale	e oil and	
10		Apple, pear		Arsenate of l	ead		While the last blossoms are falling
$\frac{12}{13}$	Slug Tent Caterpillar Climbing Cutworm Trunk Borer	All orchard Orchard tree	trees	Arsenate of le	ead		When insects appear When insects appear Scatter when insects appear
$\frac{16}{17}$	Grasshopper Flea Beetle Cutworm Root Maggot	Garden plan Garden plan	ts	Bordeaux Bordeaux Sulphur-lime	or	kerosene	When insects appear When insects appear When insects appear Apply to soil before maggots appear
				Poison bait .			Dust the plants before the worms eat in
20	Aphis		and ornamental				Just as soon as insects appear
22	Moss and Lichens	Fruit trees . Peach		Sulphur-lime			When leaves are off the trees Just before the buds open
24	Brown Rot or Fruit Mold Scab	etc Plum, cherry	, peach	Sulphur-lime Bordeaux Sulphur-lime			Just before the buds open Just before the blossoms open Just before the blossoms open
$\frac{26}{27}$	Blackspot Canker Scab	Apple Potato		Formalin, 1	poun	d to 30	Immediately after leaves fall
28	Potato Blight	Potato		gallons wat Bordeaux	er		Soak for two hours July 1 to 15
29	Anthracnose	Bean		Bordeaux			When plants are all started
30	Smut	Wheat and o	ats				

Nico-Fume Tobacco Paper

For fumigating greenhouses and other places where fumes can be confined. Considered indispensible by our most successful greenhouse men.

Price, 24 sheets, 75c; 144 sheets, \$3.50.

TREE TANGLEFOOT

To protet trees against climbing insect pests in a simple, economical and effective way, use Tree Tanglefoot — a sticky substance applied directly to the bark of trees. One application remains sticky three to four months fully exposed to the weather. Easily applied with a wooden paddle. One pound makes a band 8 to 9 feet long. No mixing, always ready for use.

Will not injure trees. Is far superior to burlap bands, which require daily inspection to give partial protection,

Price, 3-pound can

whereas Tree Tanglefoot bands require only occasional inspection to give absolute protection.

Price, 1-pound can \$0.30



FORMALDEHYDE

A Sure Preventive for Smut in Grain

This has proved to be much better than vitriol, etc., for treating grain to prevent smuit. Also potatoes for blight and scab. Formaldehyde is sold by the pound; one pound is sufficient to treat 40 to 50 bushels of grain. Price, 1 lb. bottle, 40c; cannot be sent by mail.

BLUESTONE-Market price. Use 1 lb. to 5 bu. of grain.

Grafting Wax

One-half lb., 30c; 1 lb., 50c postpaid.

Beeswax

This is run in pound cacks and is pure. Price, lb., 50c.

Paris Green

Poor Paris Green is dear at any price. The brand we handle is warranted strictly pure and will comply with state laws. Effective against all chewing insects. One-lb. pkg., 35c; 5-lb. pkg., \$1.40.

Whale Oil Soap

Used as a summer spray for hop louse and green aphis. One lb., 10c; 100 lbs., market price.

Quassia Chips

Used with Whale Oil Soap for lice on cabbage, cauliflower, etc., and on fruit trees. Lb., 15c.

Hellebore

Especially used for destroying turnip, currant, and gooseberry worms, larvae of sawflies, etc. One lb., 40c.

Kerosene Emulsion

Will kill suctorial insects. One qt., in tin cans 50c; 1 gallon, in tin cans, \$1.25; 5 gal., \$3.50.

Hammond's Slug Shot

For destroying slugs, cabbage and turnip flea, currant worms, etc. Per lb., 15c; 5-lb. pkg., 60c.

Hammond's Grape Dust

To prevent mildew on roses, grapes and gooseberries. Per lb., $15c;\ 5\text{-lb.}\ pkg.,\ 60c.$

Tobacco Dust

One of the best remedies for green and black aphis, fleas, beetles. Price, 1 lb., 10c; 10 lbs., 75c freight.

Sulphur

Powdered, lb., 5c; 100 lbs., market price.

Bluestone

Used successfully in winter sprays. Per lb., 15c. If wanted in 100-lb. or barrel lots, market price.

SULPHO-TOBACCO Plant and Animal Soap

A Wonderful and Inexpensive Insecticide

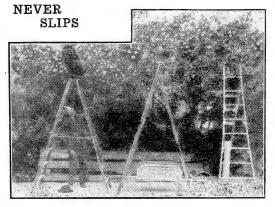
Sulpho-Tobacco Plant- and Animal-Soap is a powerful agent for the destruction of all bugs and insects. One or two applications will rid plants of the pests. Full directions with each cake.

Destroys, cabbage, squash, and potato bugs, currant worms, lice, green-fly, mealy bug, red spider, etc. Sure death to all plant insects indoors and out-of-doors. Of special value for spraying shrubs, fruit trees and vines. Is also valuable as a wash for dogs and other animals.

3 oz. cake makes $1\frac{1}{2}$ gallons solution. 10c postpaid, 15c.

8 og. cake makes 4 gallons prepared solution. 20c; postpaid 30c.





No.

No. 10

No. 11

See Inside Cover for New Postal Rate.

Lightest and Strongest Safety Combination Fruit Extensions Safety Stepladders

The Never-Slip Stepladders are constructed of carefully selected No. 1 fir, securely put together with bolts and screws. They have the latest improved steel head, making a ladder, light, strong and durable.

Price,	No. 2	2 Safety	Stepladder,	per ft	\$	0.50
Price,	No.	10 Safet	y Stepladde	r, per ft	5	.50
Price,	No.	11 Safe	ty Steplado	der (can	be extended,	
mak	ing a	pointed	ladder), pe	er ft		.60

Edgemont Lid Press



All fruit growers sooner or later feel the need of a good, durable and handy LID PRESS. In offering the Edgemont to the public we are confident that it will fill a long-felt want. It is the result of several years' experimenting, with the view of embodying in a single machine qualities making it easily the best on the market.

SAVING TIME is just as essential in the packing house as it is in the shop or factory. A number of the special features of the Edgemont Lid Press are time savers, which are quickly appreciated by the user. The stripper nail box delivering the nails all points down; the placing of the lids in position endwise by the clamping yoke; the little spring attachment holding the cleat in place, all tend to make nailing an easy, quick and simple operation. Price, \$12.50.

RAFFIA

Natural color: for nursery work. Price, 1 lb., 25c.

TREE LABELS

Wood, 31/2 inch, wired. Price, 100, 15c; 1,000, \$1.00.

0 5 10 15 20 35

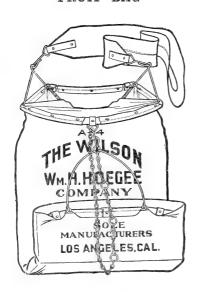
SPRAYOMETER

The Lime-Sulphur wash for spraying has become recognized by the orchardists as one of the best and most economic remedies for numerous forms of disease, fungi and insects, injurious to fruit trees.

In making up this wash there are two operations: first, making the concentrated solution from lime, sulphur and water, if the product is to be home-made; and the second diluting for use in spraying the trees.

It is necessary in each of these to know the strength or weight of the solution, and the only practical way of ascertaining this is by means of a Hydrometer. The Hydrometers made for this purpose are known as "Sprayometers." It is practically impossible for the fruit grower to be without one, at least, as in all the methods used for obtaining data for the making of the wash, readings referred to the Hydrometer will be found. In selecting these instruments consideration should be given to the fact that only the most accurate will give the best results, and that "Taylor-Rochester" is a synonym for accuracy. Price, \$1.00; postpaid, \$1.10.

THE WILSON BOTTOMLESS FRUIT BAG



Our Canvas Picking Bag is the best article yet introduced to facilitate the careful and expeditious haudling of apples, pears, oranges, lemons, and other fruits that are picked and emotied into the boxes or barrels on the ground.

The mouth of the bag is held open by a circular spring wire, which makes it easy to pass the fruit from the tree into the bag without crowding or jamming. They are

hungfrom the shoulder by a strap, are light, flexible, easy to handle, weighs only two pounds, and when filled holds one-half bushel. When climbing into a tree the picker swings the bag behind his arm, leaving only room enough to pass in the fruit. After a trial he will agree that they are the best and cheapest gatherer made. An active apple picker can fill and empty the bag 200 to 250 times per day, without damage to the fruit. An expert picker can even do better than that. There is no question about the economy and the advantage in handling fruit with the use of the Wilson bag. A good picker can pick enough more, and to a better advantage with one of these, and pay for its cost in two days. Weight, 3 lbs. Price, express or freight, \$1.50.

PRUNING TOOLS





No. 20

No. 10

Waters' Long Handle Tree Pruners

No. 20—Indispensable in pruning tall trees. (See cut No. 0.) Cannot go by mail. Purchaser will have to pay freight or express charges. Price, 6 ft., 75c: 8 ft., 90c; 10 ft., \$1.00; 12 ft., \$1.15; extra blades, 15c each.

Duplex

See Cut No. 10

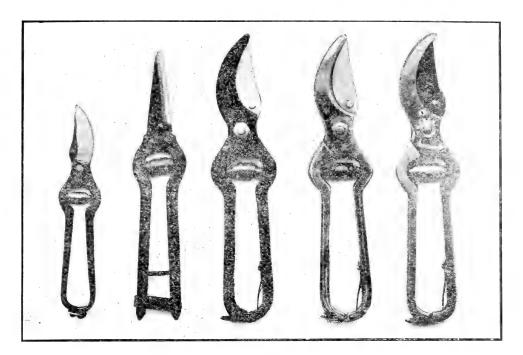
A double-edged saw, with fine teeth on one side and coarse teeth on the other. Can also furnish this with teeth on one side only. Weight, 1 lb. Price, 75c.

SEARIGHT PRUNING TOOLS

This year we have taken up the line of Searight Pruning Tools, believing them to be the best line on the market.

Not one single piece of casting of any description is used in making these pruners. All hooks, metal handles, etc., are forged from steel, which should be sufficient guarantee as to its quality. All other metal parts, not necessary to be made of forgings, are cold rolled sheet steel. They are not cheap, nor built for cheap trade. Cheapness and quality seldom go together, yet they are cheap when quality, service and satisfaction are considered. These tools, therefore, are produced and offered to the public at as low a price as class and quality will permit.

For Books on Pruning, Nursery and Fruits, see Page 74.

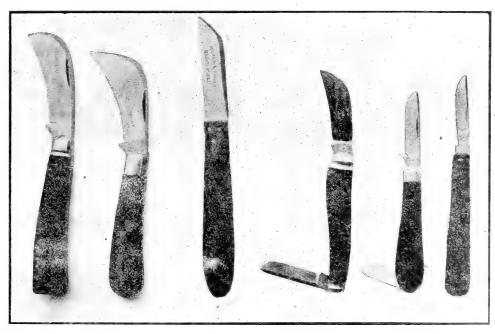


No. 2 No. 3 NOTE—Compare numbers on cut to those in description. No. 1—Length 6½ inches, black handle, polished blade; fine for trimming roses or thinning fruit. Price, 30; post-

No. 808 No. 888 No. 2—Length 7½ inches; an extra good tool for thinning fruit. Price, 35c; postpaid, 45c.

No. 3—Length 9 inches; California pattern, black finish, volute spring. Price, 50c; postpaid, 65c.

For Prices of Nos. 808 and 888, see page 54.



No. 6 No. 7 NOTE-See numbers in description.

Pruning Knives

No. 6—Polished wood handle. Price, \$1.00.
No. 7—Plain wood handle. Price, 75c.
No. 9—Budding and pruning knife: horn handle, best steel blades. Price, \$1.00.

No. 10 No. 11 Grafting Knives

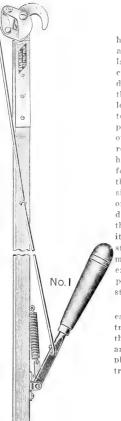
No. 8—Plain wood handle, stationary blade, razor of steel; made by Maher & Grosh. Price, 40c.

Budding Knives

est No. 10—Ebony handle, ivory, bark opener. Price, \$1.25.
No. 11—Horn handle, stationary bark opener. Price, 75c.

No. 8

No. 1. Extension Tree Trimmer



No. 1 has a compound lever head and is made with a hook and side lever. It is calculated for heavy work and will cut a limb up to 114 inches in diameter. Instead of running the rod connecting the knife lever along one side the pole to a handle lever, we have placed the handle lever on the opposite side, which allows the rod to cross the pole. (We have a patent pending on this feature.) As a result one-half the strain is thrown on one side of the pole and one-half on the other, which gives about double strength, and instead of the pole warping and bending, it has a tendency to remain straight and stiff. We recommend No. 1 trimmer in lengths exceeding 10 feet as the compound leverage relieves the strain on the nole.

The strength, durability and easy cutting qualities of these trimmers will appeal to both the merchant who handles them, and the man who may have the pleasure to uset them. Each trimmer is fully warranted.

No. 777. Two-Hand Pruner

Our No. 77 is designed on scientific principles and is the result of several months' study and experimental work.

Because of the fact that the majority of men are right handed, we have placed the blade on the opposite side from the general custom.

This permits the blade to be placed next to the body or main limb of the tree with the hook handle held in the left hand, while the right hand operates the blade. It may be readily seen with this arrangement that the hook remains stationary while the blade closes, instead of the blade being held stationary while the hook closes by twisting around the branch wounding the bark. It has other strong features, as follows:

The blade positively will not cut or dig into the hook. The blade will not push the branch from between it and the hook. By dropping the hook considerably below the center line we have produced a positive draw cut superior to any other, with an opening between blade and hook allowing a straight thrust at the branch.

No. 707 two-hand pruner is the same pattern as No. 777, with shorter handles, but without the finish. Weight 4½ lbs.

No. 888. Plain Hand Pruner

This pruner will be found second to none in easy cutting qualities, material and workmanship. It is placed on the market to meet the wants of those who wish a thoroughly good tool.

oughly good tool. No. 808. Same as No. 888 but not polished. (For cut, see page 42.)

No. 18. Hand Pruning Saw



In order to make our line of pruners complete, we have added a bracket hand pruning saw, with a blade so arranged as to be turned instantly to any angle.

This type of saw is the most popular because it is light, is capable of being used at any angle with practically no danger of breaking or buckling the saw. It will cut rapidly, make a clean cut with no danger of wounding the bark. This type of saw is becoming very popular wherever used. No orchard kit of tools is complete without a saw of this type.

PRICES OF SEARIGHT PRUNING

TOOLS	
No. 1-Tree Pruner, 8-ft. poles	82.50
No. 1-Tree Pruner, 10 and 12-	
ft. poles	2.75
No. 888-Plain Hand Pruner, 9-	
inch, \$1.60; postpaid	1.85
No. 888-With Extra Blade, 9-	
inch. \$1.75; postpaid	2.00
No. 808-Hand Pruner, 9-inch,	
1.00: postpaid	1.25
No. 777-Two-Hand Pruner, 26-	
inch handles	200
No. 707-Two-Hand runer, 24-	
inch handles	
No. 18-Hand Pruning Saw	1.75

Manufacturers tell us that owing to the advance on arsenic, it costs about \$1.00 per hundred pounds more to make. Arsenate of lead this year than last. We list it at practically the same price.

When you need a Spray Pump, write for our Pump Catalog, or call and let us show you one. We are agents for the Bean Spray Pump, one of the most Efficient, Economical and Satisfactory Spraying Outfits in the world.

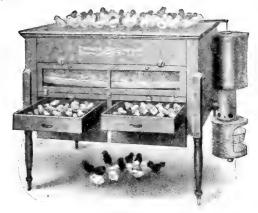


For Book on Pruning, see Page 74.

Incubators and Brooders

We Are Authorized Agents for GENUINE STANDARD CYPHERS INCUBATORS Patented

(Look for Trade Mark—Demand the Label)



No. 3

Fire-Proofed, Insurable, Self-Ventilating, Self-Regulating, Non-Moisture, Efficient, Durable and Positively Guaranteed

Practical poultry raisers who mean business and desire the greatest possible success should look for and demand the qualities that have made Cyphers Incubators world famous.

To ow na Cyphers is to have an incubator that stands first, not only because it has affixed to it the fire insurance label granted by the National Board of Fire Underwriters and bears a world-wide reputation, but because of the well-established fact that it is the best hatcher of large, vigorous, livable chicks. It is positively guaranteed to outhatch any other make of incubator under widely varying conditions, season after season, and to last ten years without repairs.

For 1913—We offer our customers the Cyphers Company's complete line of incubators and brooders—the best on the market. For years the Cyphers Incubator has been consistently improved, always maintaining its leadership, until today it represents all that is most efficient, convenient and reliable in incubator construction.

The principles of construction that have made Cyphers Incubators "the world's standard hatchers" for the last twelve to fifteen years remain unchanged in the 1913 pattern. Their patented features, their entire freedom from the bothers, disappointments and losses common to the "cheap" or "bargain" incubator, make these high-class machines the best for you to own first, last and all the time. They are used with unequaled success in all parts of the civilized world, under every practical condition by men and women in all walks of life. They are money savers and money makers for poultry raisers who "mean business"—for men and women who want a real incubator with which to get out of poultry keeping all the profit and all the pleasure there is in it.

CYPHERS INCUBATORS have now been on the market fifteen years and today are used by more Government Experiment Stations, on more large, practical poultry plants, on more successful duck and egg farms and by a larger number of foremost poultry breeders than all other makes combined. For proof of these statements send to us for a copy of Cvohers Incubator Company's latest complete catalogue—1913 edition—now ready for mailing, free on request. Book, $7\frac{1}{2} \times 10$ inches.

EVERY STANDARD CYPHERS INCUBATOR IS GUARANTEED by the manufacturers to do first-class work in the hands of every purchaser who will give it a fair trial and we hereby place our guarantee back of theirs. In buying a Cyphers you take no chances. Persons who earnestly desire to succeed in the poultry business should have the right tools with which to work. Write us today for free illustrated catalogue telling all about these superior hatching machines.



NO 1 STANDARD CYPHERS INCUBATOR, 1912 PAT-TERN—Fire-proofed, insurable, 144-egg capacity. Showing 'split' lower diaphragm removed egg tray and upper diaphragm partly drawn out. Price, \$25.00.

SIZES AND PRICES OF CYPHERS FIRE-PROOFED INCUBATORS

FREE ON BOARD CARS, SPOKANE, WASH.

No. 0 Holds 70 Henn	Eggs	17.00
No. 1 Holds 144 Hen E	ggs	25.00
No. 2 Holds 244 Henn	Eggs	35.00
No. 3 Holds 390 Hen	Eggs	42.00

Pedigree Egg Trays

Pedigree Trays are in demand by poultry raisers who use trap neests of various kinds for special breeding purposes; also by those who wish to keep in senarate lots, until properly toe-marked, the chicks hatched from eggs of any variety of fowls obtained from different matings, or from different pens. They are a valuable aid to systematic, scientific poultry breeding. By their use the eggs placed in a No. 0 or No. 1 Standard Cyphers Incubator can be kept in four separate lots; also the chicks that hatch therefrom, and the eggs in a No. 2 or No. 3 Standard Cyphers can be kept in eight separate lots, also the chicks that hatch therefrom.

Price,	each,	No.	1	\$3.00
Price,	each,	No.	2	3.00
Price,	each,	No.	3	3 50

Demand This Label—Your Safety



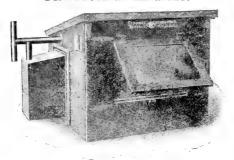
Form of Brass Label to be Found (in Serial Number) on Every Cyphers Brooder—All Sizes

We Are Authorized Agents for STANDARD CYPHERS COMBINATION BROODERS AND COLONY ROOSTING COOPS

For 1913—Cyphers Unequaled Apartment Brooders and Combination Roosting Coops have the same important advantages over all other makes that are possessed by Cyphers Company 1912 incubators, in that they are fire-proofed and insurable, having the first fire insurance unspection label ever granted on a brooder.

Cyphers 1913 Brooders, every size and style, are self-regulating, self-ventilating and varmint proof. The outdoor styles are useable also as colony coops for the growing chicks. They are easily and quickly converted into colony roosting coops by simply taking out the hover, which is made removable for that purpose.

Cyphers Style A Outdoor Brooder Fire-Proofed-Insurable



Two-Apartment, Combination Outdoor Brooder and Colony Roosting Coop, Self-Ventilating and Self-Regulating

This double use of the Cyphers Brooder means a considerable saving of money. It makes a safe and comfortable enclosure for the young chicks at night and saves the buying of a coop for them. These outdoor brooders, on account of their fire-proof construction, can be used indoors, although we supply a special brooder, Style D, for indoor purposes. All Cyphers 1913 Brooders, both outdoor and indeed senting either transfer these constructions. and indoor, contain either two or three anartments. popular Style B (shown in illustration herewith), contains

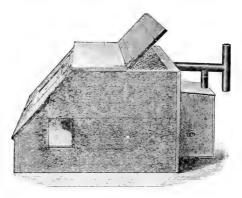
popular Style B (shown in illustration herewith), contains three apartments—first, roomy space under the hover; second, hover chamber; third, well-lighted exercising apartment. It has often been said by users of the Cyphers Brooders that they mother the chicks better than a hen. An important reason for this is found in the great practical advantage possessed by the entire line of Cyphers Brooders for 1913 in their self-regulatine feature. For years the self-regulator was attached only to the highest priced Cyphers Brooder (Style C), but it was so well received that now it is attached to all the Cyphers Company Brooders. It automatically regulates the heat in the brooder underneath the hover at all times, whereas in brooders without a regulator the heat has to be governed by a continuous watching of the lamp and turning the wick up or down whenever more or less heat is required.

Style B Outdoor Brooder Fire-Proofed-Insurable



Three-Apartment, Combination Outdoor Brooder and Colony Roosting Coop. Self-Ventilating and Self-Regulating. Floors of Hover and Exercising Apartments on Same Level

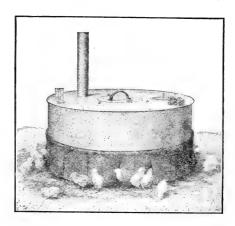
Cyphers Style D Indoor Brooder



Style D

This brooder is practically the same in all respects as the Style A Outdoor type, except that the upper half is the Style A Outdoor type, except that the upper half is more convenient in shape and construction for indoor use. This brooder is for use in any kind of building where chicks may be kept, including rooms in dwellings, or suitable places in barns, shede or ordinary obultry houses. This brooder, being without an exercising apartment, should be used in rooms or enclosures in which the chicks can exercise freely during the daytime, or in poultry houses equipped with pens to be used by the chicks as runways. runways.

Cyphers New Portable Hovers



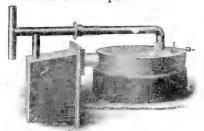
This Hover is self-regulating, self-ventilating, all-metal and indestructible. It is the latest improvement in portable Hovers. It is positively and infallibly automatic in ventilation—a patented feature—the trapping of poisonous gases in a ''dead air space'' underneath the brooding Hover having been rendered absolutely impossible by the incensions but simple construction. ingenious but simple construction.

Used without a brooder case, this Hoved will operate perfectly in any temperature above the freezing point and will do satisfactory work in a considerably lower temperature if the inmates are warmly bedded and protected from drafts, especially at night. With a brooder case and used indoors it will operate successfully in any temperature down to the zero mark, provided the chicks are well-cared for otherwise. cared for otherwise.

This Hover is for indoor use and has a rated capacity of seventy-fie newly hatched chicks, or of fifty chicks that are ten days to six weeks old. It will hover comfortably one hundred newly hatched chicks, but we advise strongly against trying to brood chicks in flocks greater than fifty to seventy-five—the smaller number preferred at all ages. Price, \$11.50.

For Poultry Books, see Page 74.

All Metal Adaptable Hover



Self-Regulating and Bears Insurance Label as Separate Device

In addition to this unequaled line of brooders, we offer separately the Cyphers Company's world's challenge Adaptable Hover. This machinery made, all-metal, guaranteed fire-proof heating and brooding device is suitable to be used anywhere that heat is required for brooding chicks or ducklings. It can be used in a roosting coop, colony house, shed, hen house, barn or other building with or without any additional enclosure for the chicks, or in a large goods case or organ or piano box.

Is pronounced by thousands of users to be the best

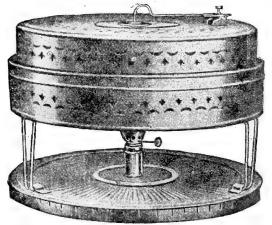
Is pronounced by thousands of users to be the best device thus far invented for heating home-made brooders. Recommended especially for use in long brooding houses, one hover for each pen. Adantable hover is complete in itself, bears insurance label as a separate device, and is safe to use anywhere. Weight, boxed for shipment, only

Complete Catalogue for 1913 contains fully illustrated description of this self-regulating, fire-proof hover, also of the entire line of Cyphers Apartment Brooders.

SIZES AND PRICES OF CYPHERS ADAPTABLE HOVER AND COMBINATION BROODERS FREE ON BOARD CARS, SPOKANE, WASH.

Adaptable Hover, capacity 75 Chicks	31,1.50
Style A.—Two Apartment Outdoor Brooder, capacity 75 Chicks	16.00
Style B—Three-Apartment Outdoor Brooder, capacity 100 Chicks	21.00
Style D-Three-Apartment Indoor Brooder, capacity	

The Cycle Hatcher



The Cycle Hatcher is designed to take the place of the hen and supply the wants of beginners in poultry raising or many that do not wish an expensive outfit. These machines hold 50 eggs and are so constructed that the supply of heat comes from the center and is radiated in all directions like the rays of the sun, carrying with it an abundant supply of fresh, heated air, that is required to travel only six inches to reach every egg in the extreme portions of the nest. The heat is governed by a double wafer regulator that is placed so close to the eggs that it is sensitive to the natural heat of the growing embryo chick in the egg as well as the supplied heat from the lamp. The Cycle Hatcher is too simple in construction to require any long description of details, as the cut of the nest and complete machine show practically all there is to it. Price, complete, §6.50.

Brooder-Hatcher

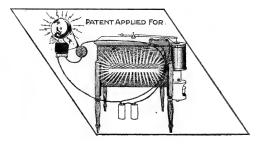


This combined Hatcher and Brooder is the result of many years' experiments to bring about desired conditions, making one lamp do double duty, and at the same time to have a machine constructed in a way to do successfully the work artificially, and at the same time to carry out the natural laws of incubation and brooding.

It is the machine that has made it possible to get such large returns from a few hens in the Philo System plant.

Just as good results may be had with this machine by setting a few eggs every day, once each week, or filling the machine half full of eggs and every ten days putting in a new supply, thus taking off a hatch every ten days or oftener, then filling in the empty portion of the machine with fresh eggs. Price, \$8.50.

Electric Alarm and Lighting System



Mr. Incubator Operator:

Would you care to insure yourself against spoiled hatches during the life of your incubator for a fraction of the cost of one batch of eggs Would you enjoy going to bed at night with the peaceful assurance that you would not be allowed to sleep through such a calamity as a lamp going out or cmoking and exploding, probably burning down your house, or burning too high and literally cooking the eggs or the emerging chicks Would you like to be able to read your incubator temperature and have the entire interior illuminated and be able to see every egg and chick by the pressure of a finger on the edge of the machine?

to read your incubator temperature and have the entire interior illuminated and be able to see every egg and chick by the pressure of a finger on the edge of the machine? Until now these things have been impossible, but they are made not only possible but practical by the invention of the Alexander Electric Alarm and Lighting System. These outfits may quickly be installed in any standard

These outfits may quickly be installed in any standard box incubator by anyone who can read the directions and can use a screw-driver. No knowledge of electricity is required. The operation is so simple and positive that a child can adjust it. A specially constructed thermostat is placed in the egg chamber and is adjusted and set so that an alarm bell rings when the temperature goes above or below any two desired points, for instance 98 and 105 degrees. If your lamp goes out you know it before the eggs are chilled. If the lamp burns too high or the regulator fails to work promptly or properly, your hatch can not be spoiled, for the bell will ring and continue to ring until you shut it off. Price of this outfit, complete, with one bell, battery, tantalum lamp wire, switches, full directions, etc., \$3.85. Weight, 7½ lbs.

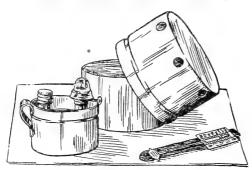
Galvanized Lampless Brooder

These brooders are round and lined with the best quality of water-proof, non-conductming material to retain the heat and make them easily cleaned. The cloth cover is attached to a wire frame and is adjustable to any height, that they may be easily raised as the chickens develop. There is a mattress or quilt three inches thick, filled with finely picked non-conducting material, a combination of wool and cotton, which makes the very best quality of heat-retaining material for the lampless brooders. This quilt is laid on top of the adjustable cloth cover and retains the heat in a manner which has enabled us to raise chickens without lamps in a temperature below zero. Price, each, \$3.25.

The Philo System

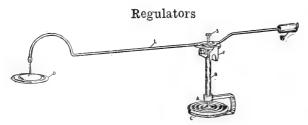
The new book, The Philo System of Progressive Poultry Keeping, gives full particulars regarding wonderful discoveries with simple, easy-to-understand directions that are right to the point and fifteen pages of illustrations, showing all branches of the work from start to finish. Price, §1.00.

Common Sense Brooder Fixtures



To those who wish to make their own brooders, we highly recommend the "Common Sense" fixtures. Hundreds of poultry men are using them and some of them have 15 to 20 set. These fixtures include an upper and lower drum, Inland Safety Lamp and Thermometer. The construction of the brooder is simple and the air circulation perfect. For outdoor use the walls should be double and the roof inclined and covered with roofing.

MANNER OF CONSTRUCTION—First, put in a tight floor 9½ inches from the bottom of brooder. Then mark and saw out size of large drum on this floor (using drum as pattern), 12 inches from center of side of brooder, to center of drum. Secure drum in place, then nail one-inch cleats two feet square under and around the drum, cutting out a two-inch hole from cleat and side of brooder to allow air circulation. Nail the lower drum up on these cleats. Bore sufficient holes through two sides of brooder, under this floor, to carry off fumes and furnish air for lamp. For the hover nail thin boards together, making it two feet square. Around this tack oilcloth wide enough to reach floor when hover rests on drum. Set the lamp under center of drum. Be sure and keep the receptacle on top of lamp always filled with water as this prevents overheating and explosion. Price, \$3.50.



In this Regulator as shown by the illustration herewith, the wafer is inverted and as it expands it acts through the short lever beneath it on the connecting rod, and the down pull of the connecting rod so moves the top lever as to life the damper. Accurate adjustment is secured through the adjustment nut at the upper end of the connecting rod. This regulator is accurate and reliable and will give good satisfaction. Weight, 12 oz. Price, \$1.50.

Wafer Thermostat



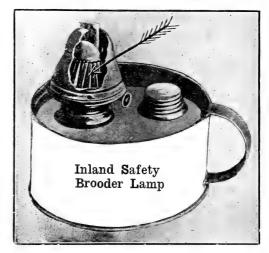
The Wafer Thermostat is made of two round concave discs, sealed together at the outer edge. The cavity between them is filled with a volatile liquid which is very sensitive to changes in temperature. Price, (postpaid, 50c.

X-Ray Egg Tester

X-Ray Egg Tester is made of the best block tin and consists of a central cylinder or lamp flue, 54 inches high, with an outside diameter of 2% inches at the base and 2½ inches at the top. It is designed for use on an ordinary hand lamp, fits over any style of burner with a diameter approximating that of the tester. In a dark room the light will be found strong enough to penetrate the shell and illuminate the interior of the egg. Price, 25c each: postpaid, 35c each.



Safety Brooder Lamp



The latest and best lamp for the brooder: requires no chimney; never smokes, but burns a steady flame. The air fingers carry fresh air direct to the flame. This gives perfect combusion and more heat for a given amount of oil than with any other burner. A water chamber is on top of lamp to keep oil and burner cool, and prevent any chance of explosion. Weight, 13/4 lbs. Price, \$1.00.

Lamps and Extras

Large Lamp for Incubator and Brooder, Wt. 2 lbs
No Chimney Burners with Collar
No. 1 Burners, postpaid
No. 2 Burners, postpaid
No. 3 Burners, postpaid
No. 1 Chimneys, postpaid
No. 2 Chimneys, postpaid
No. 3 Chimneys postpaid
No. 1 Wicks, postpaid, per doz
No. 2 Wicks, postpaid, per doz
No. 3 Wicks, postpaid, per doz

Eocene Oil

The best oil for incubator or brooder. Prices vary. Write us and we will quote.

We take subscriptions for the Reliable Poultry Journal. Price, 50c per year.

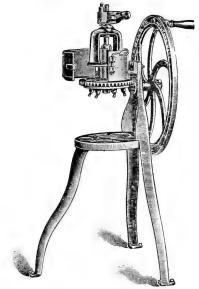
Mann's Green Bone Cutter



MANN'S NO. 5 B— Has four knives, large cylinder, and has the latest patent (automatic, governing spring feed). which makes it one or the best. Price, \$10.50

NO. 5 B. M.—Mounted on iron stand, no expense to set it up. Place for pan to catch the bone. Patented automatic governing spring feed. Cylinder, 6 inches diameter, 4 inches deep. Cutter plate has four knives instead of three. Will cut faster and easier than other types costing twice as much. Weight. — pounds.

MANN'S NO. 7—The New No. 7 is mounted on strong iron stand, and has patent automatic governing spring feed. Large, open-hinged cylinder giving instant access to all working parts; has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (Sec cut.) Price, \$15.50.



No. 7

MANN'S NO. 7½—Adapted to run either by hand or by power, without any change. The particular advantage of the No. 7½ is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7. Thus it is always ready for use. It is recommended even if you have no power at present, for should you get power in the near future, you need be at no further expense. Price, \$21.50.

The Wilson Dry Bone Mill



No. 1 is a practical mill, grinding all kinds of shells, crockery, grit, burnt or dry bone feed, etc. Instantly adjusted to grind coarse or office. Weighs 33 pounds. Diameter of hand wheel, 20 inches. Price, \$5.00.



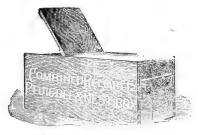
WITH A BLACK HAWK MILL in the house you crack the corn or grind any kind of grain to whatever degree of fineness you desire or whichever will best suit the use or condition of your chickens. Its wide range of usefulness, its durability and small cost will appeal to the family in town with a small flock in the back yard, and it has a large enough capacity to meet the needs of those in the country who keep poultry on a big scale. Price, \$3.00.

JOHNSON'S GRIT MACHINE (This Machine Furnished the Grit for the A.-Y.-P. Fair, as well as Nearly All of the Northwest Poultry Shows)

The Johnson (formerly Bond) Grit Machine, easiest and best machine on the market; has compound leverage, and is very powerful. Will break rock, limestone, ore, crockery, glass, dry clam and oyster shells, etc. No horse work about it. A boy of seven years can work it. It is indispensable where fowls are yarded up, or for brooder chickens. Price, \$4.25.



The Reliable Pedigree Nest Box



We illustrate herewith and offer for sale the Reliable Pedigree Nest Box. The best and most successful breeders in the country are at present following the pedigree plan and using automatic nest boxes of some kind. They can be used either for pedigreeing the stock or as an ordinary nest box. Price, \$3.00.

Reliable Grain and Oat Sprouter

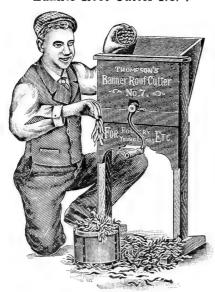


Photographic View of the Front

Poultry needs green food in one form or another, especially in the winter time. If the scientific experimenters had not proved this fact, we would still know it to be true simply by watching the fowl in its natural state. There is nothing that fowls eat with a keener relish than bugs, worms, grubs, and insects of various kinds, which they secure in the summer on their own accord.

You want the eggs when the eggs sell at the highest price. Green food makes your hens lay; they eat this green food because it is good for them. Nature demands it and if you want to get the best results from your fowls, you must follow nature's methods as nearly as possible. Price, \$8.50.

Banner Root Cutter No. 7



Banner Root Cutters

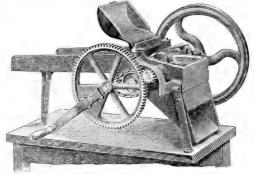
These excellent machines are so low in price that every

These excellent machines are so low in price that every farmer, stock raiser or poultry man should have one, as roots are the cheapest green feed for stock, and make healthy hens, their economy and food value is astonishing. The Banner is substantially made of first class material, cuts fast, is easy running, leaving the food in fine ribbon-like strips, making choking impossible. Is eaten by fowls of any size, or by lambs.

We offer two sizes: No. 7 (see cut). Weight, 50 pounds, \$5.50.

No. 28, a larger cutter with pulley for attaching power; can also be run by hand. Weight, 150 pounds, \$21.50

"New Model" Clover Cutter for Poultry Removable Steel Knives-Adjustable Cutter Bar—Runs Easy—Cuts Fine-Is Durable



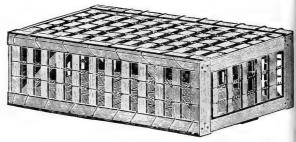
The e''New Model'' Clover Cutter is designed for cutting either green or dry, such growths as clover, alfalft, vegetable tops, etc., into 1/2 inch lengths. These growths are the cheanest and most productive egg-forming poultry foods for cold weather.

The "New Model" is made only of iron and steel, from

Price, with extended shaft and pulley for power...... 13.00

SITES' VENTILATED COOP

For Shipping Live Poultry The Best, Cheapest, Strongest, Lightest and Most Durable Coop in Use



Our latest improved Coops are far superior to any heretofore made having substantial frame ends and thoroughly braced which adds additional strength, durability, firmness

and prevents swaying or sagging.

The door on top of Coop is securely held in place by a steel spring which forms a hinge for the door. It cannot become detached from the Coop and is always in place.

Owing to thorough ventilation poultry is prevented from smothering. Shippers using our Coop (owing to lightness) save in express charges alone from 50 to 75 per cent. The Coop is easily handled and convenient for loading and transportation. Poultry will show to better advantage owing to neatness and beauty of Coop. We carry in stock the following sizes:

Chicken Coops, standard size, 3 feet long, 2 feet wide and 1 foot high, \$2.00.

Chicken Coops, special size, 3 feet 8 inches long, 2 feet 3 inches wide and 1 foot high, \$2.25.

Inland Shipping Coops

All wood, neat, very light, but strong. Poultry raisers selling poultry at fancy prices should always use these

No.	110x21x18,	35c;	6	for	\$1.50
No.	2-10x24x20,	45c;	6	for	2.25
No.	3-20x24x20.	55c:	6	for	2.75

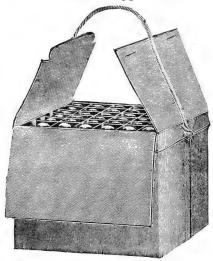


Reliable Egg Carrier

Nicely painted; equipped with the very best fillers. Patent top and sling handle. Holds twelve dozen. (See cut.) Weight, 81/2 lbs.

Price, each. 75c.

The Defiance Egg Carrier



Holds 12 dozen eggs. It consists of one piece of heavy card board, and when set up ready for use is 12 inches long, 12 inches wide and 9½ inches high, weight, including fillers and division boards, 6 lbs. Price, each, 35c.

Paper Egg Boxes

Intended for use in delivering eggs to private families. If you have a select egg trade you should use this box. They ship this box. They ship knocked down at a low rate. One doz., 15c; per 125. \$1.25: per 500. \$4.25; per 1000, \$8.00.



Shipping Boxes for Day-Old Chicks

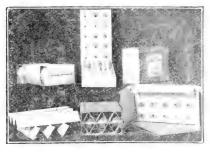
These Shipping Boxes are well made of high-test corrugated paper, which is very strong and durable, and vet is so light in weight as to reduce express charges to the minimum—a feature that will be appreciated by our customers. The construction of these boxes is such as to afford the greatest strength and stiffness, without unnecessary bulk or weight. They are shipped in "knockdown" form to take lowest freight and express rates, and are constructed in such a way as to be easily and rapidly assembled.

25-Chick size, 20c each; dozen \$1.75

Egg Cases

Pasteboar	d fillers	for	30-doz	en ca	se			20
Pasteboar	d fillers	, per	case	(for 1	2 30-doz.	cases)	1.3	80

Diamond Egg Box



The Diamond Egg Carrier is something entirely new and in a class by itself. We can ship them in the flat and thereby save a large amount on freight. The peculiar construction of the box in V-shaped wedges enables us to make it of very light material while still retaining great strength. The construction is simplicity itself. A child can put them together and pack the eggs. There is no dust, no litter and they are always ready. Eggs can be shipped on a moment's notice. The eggs do not come in contact with the outer box at all, having—cushion on all sides and when wrapped in tissue paper, which always accompanies each package, there is absolutely no jar, thus insuring safe transportation to a customer. Eggs can not be taken out or substituted without detection, as we use a gummed label paper to seal the box with.

Made in 15, 30 and 25-egg sizes. For 50, 75 and 100 eggs use 2, 3 or 4 of the 25-egg size. With each package and enclosed therein are full directions for setting ungummed address labels, tissue paper with which to wrap the eggs and gummed paper with which to seal the box.

Price, 15-egg size, 15c each, 6 for 75c; dozen.........\$1.40

Price, 15-egg size, 15c each, 6 for 75c; dozen.........\$1.40
Price, 30-egg size, 25c each, 6 for \$1.25; dozen..........20
Price, 25-egg size, 20c each; 6 for 1.10; dozen...........20
Price, 15-egg size, duck, goose or turkey, dozen.................1.50

Drinking Fountains

The Galvanized Iron Drinking Fountains embody every good feature of a down-to-date drinking fountain, and are believed to be the best in use. They have done much to supplant the old-style earthenware fountains which could not be thoroughly cleaned and purified. A fountain that cannot be thoroughly cleaned and purined.
A fountain that cannot be easily and readily cleaned out, and in which water soon becomes sour, is highly objectionable. A fountain that will able. A fountain that will burst if the water in it freezes also an annoyance and a source of loss. These foun-tains are easily filled, easily



cleaned and kept clean. Prices: 1 qt., 25c; 1/2 gal., 35c; 1 gal., 50c.

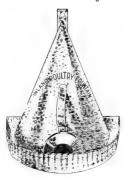
Inland Feed and Shell Box



Necessity in Every Organized Poultry Plant

The Inland Sanitary Feed and Shell Boxes work a material saving in grit, oyster shell, ground bone, charcoal or poultry foods. They are thoroughly practical, self-feeding boxes, practical, self-feeding boxes, well made out of heavy galvanized iron. It is provided with a cover or lid, which protects the contents and being placed at an angle furnishes a slanting top, preventing the fowls from roosting on the top of the box. It is also provided with a ctroup health of which it may box. It is also provided with a strong handle by which it may be hung to the wall of the poultry building. Price, two compartment, 65c; three compartment, 75c, weight 3 lbs. Price, four compartment, 85c. weight 4 lbs.

The Inland Poultry Fount



These fountains are something new and extra serviceable in the way of Poultry Fountains, and we feel that in introducing them that we have the best fount placed upon the market. The back is flattened so that it can be hung on the wall or against an upright post or board at any height. As the bottom is also flat, it can be set upon the ground or on a raised board. One extra good feature in this fount is that it will accommodate 6 to 12 fowls at once, where others only accommodate one or two. They are made of galvanized iron, and with proper care will last many years. Made in two sizes. 1 gal., 75c; 2½ gals., \$1.00.

Automatic Fountain and Feeder



Feeds water, grain, grit, etc., automatically. Is easy to fill and operate. Just lift trigger, as shown in cut, which releases pan, clip remaining on jar, leaving pan without any obstruction, atording easy cleaning. Thus a sanitary fountain.

Made to fit any
half gallon,
quart or pint
Mason jar,
We do not furnish jars.
Price, 25c postpaid,
express or freight;
each, 15c;
doz., \$1.25.



Champion Leg Band



The oldest and most popular band on the market. This band is made in one piece in two sizes, adjustable to fit any fowl. They will stay where you put them. Held by double lock, it is impossible for them to lose off. Made of aluminum or copper in two sizes, large size for Asiatic class and turkeys; small size for Plymouth Rocks and all smaller breeds. Price (postpaid), 12, 15c; 25, 30c; 50, 50c; 100, 80c.

Aluminum Pigeon Bands

Pigeon Bands are seamless and open, with number.

PRICE, POSTPAID

Seamless, 12, 30c; 25, 60c; 50, \$1.00; 100, \$2.00. Open, 12, 20c; 25, 35c; 50, 60c; 100, \$1.00.

When buying your feeds, remember there are none better than the Clover Leaf Brand.

Acme Spring Lever Poultry Punch



If you keep a record of your chicks, of the different breeds, hatches, strains, etc., there is no better, quicker or easier way than by using our latest invention, the Acme Spring Lever Poultry Punch for making the web between the toes. **Price, 35c postpaid**.

Petty's Poultry Punch



Latest, most convenient Poultry Punch; can be put on a key ring or used for a watch charm. Will not clog. Thoroughly practical. Price, postpaid, 25c.

Wire Nests



Plain Nests. These nests are strongly made from heavy japanned steel wire and will last a lifetime. They are intended to be fastened to the wall with screws or screw hooks. There is no room on them for lodgment of lice or vermin of any kind; they are easy to keep clean and are far superior to wooden boxes. Price, each, 20c; per dozen, \$1.50. Weight, each, 12 oz.

Lime Nest Eggs

The popularity of the Lime Nest Egg has spread across the country like a great storm wave sweeping the continent. Not only the poultry fancier, but the every-day farmer appreciates its merits and superiority -over the ordinary porcelain nest eggs.

ordinary porcelain nest eggs.

They look more like a real egg. Its composition is a natural nest disinfectant. The porcelain egg becomes so cold in winter that a hen will not sit upon it but scratch it out of the nest. Lime is a non-conductor of heat and cold and does not become near so cold. It is never scratched out of a nest. Mrs. Hen likes it. Price, 3 for 10c, 12 for 30c; postpaid, 55c.

Medicinal Nest Eggs

The great discovery for ridding poultry of vermin. The least vermin. The least trouble to use of any remedy on the market Only place the eggs in the nests. They do the

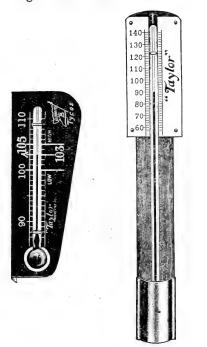
Medicated Nest Eggs should be used the year around, as in winter when they are all on the fowls is the best time to destroy lice. Our Nest Eggs will kill or drive them off to perish try will then be in good condition to start in the spring.

Directions for Use-Don't expect one egg to rid your poultry and poultry house of lice. To

poultry house of lice. To realize the best results keep an egg in each nest for laying hens; in each coop for brooding hens and chicks, and enough to change about under setting hens. Place one egg in each nest in which the hens are laving nad leave it there. Do not leave the eggs under setting hens more than one day at a time, unless put under the straw in the nest. Price, each, 5c; doz., 50c; postpaid, S5c.



High-Grade Thermometers



The best incubators and brooders manufactured are worthless unless the thermometers therein are correct. The thermometers here listed are guaranteed by the manufacturers to be thoroughly and expertly tested before they are offered to the public. Price, Incubator Thermometers, 75c postpaid. (Hang it from the top of egg chamber so it touches the eggs.) Brooder Thermometers, 60c postpaid.

"Tycos" Certified Incubator Thermometer

With scale etched on the glass tube, so that should the tube from any cause work loose on the mounting, the efficiency of the thermometer would not in any manner be diminished. Made in mercury tubes only. Each, \$1.25.

"Tycos" Incubator Hygrometer



Millions of chicks die in the shell every year for the want of proper moisture conditions. The "Tycos" Incubator Hygrometer is not a regulator of moisture, but is an indicator of conditions, so that if not correct, they may be made so. Price, \$1.50 each.

The "Triumph" Caponizing Set



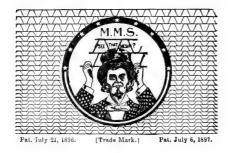
There is no doubt in the minds of up-to-date poultrymen as to the advantages of caponizing. The operation is very simple, and with a "Triumph Caponizing Set" any boy twelve years of age can perform it with safety and thoroughness. Capons, as anyone knows, sell on the market as a rule from 5 to 8 cents per pound higher than any other chickens. The demand for capons is always good, is steadily growing, and at this time a better market is assured the producer in this field than any other. Now is the time to get into the caponizing business, and the first thing to start right is to buy a "Triumph Caponizing Set." No more efficient, simple or more easily operated set is being offered the craft today than the Triumph, and you will make no mistake by selecting the Triumph

PRICES

Set	in	plush-lined,	cloth-covered case\$	3.00
Set	$_{ m in}$	polished ha	ardwood box	2.75
Set	in	japanned w	ood box	2.50

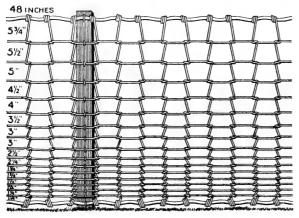
If you do not see what you want, write us. If we cannot furnish it, possibly we can direct you where to procure it.

M. M. S. Poultry Fencing



The M. M. S. wire being only one inch apart at the bottom requires no board to prevent little chicks' passing through. Also saves buying expensive one-inch mesh wire. 60 in. high, 165 ft. long, per roll, \$4.75; 5 roll lots, \$4.50 72 in., high, 165 ft. long, per roll, 5.50; 5 roll lots, 5.25

SPECIAL POULTRY AND STOCK FENCE



Made in 48 and 60-Inch Heights

To meet the demand for a fence suited for poultry and stock we are putting on the market the Special, which is particularly adapted for such general purposes. It is scientifically constructed from the best material, heavily and thoroughly galvanized.

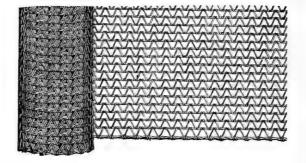
The illustration shows that the stays are in one piece running continuously from bottom to top, and that they are interwoven, so as to render it impossible to slip or spread the wires in any way. This makes the best as well as the strongest combination possible to be produced from the same amount of wire.

Heavily and Thoroughly Galvanized. Stays in One Piece Running Continuously from Bottom to Top

Detail of Construction—Two 2-ply strand margin wires No. 13; fifteen No. 14 intermediate line wires in 48-inch height; seventeen intermediate line wires in 60-inch height. Mesh wires No. 14, spacing between mesh wires, 6 inches. Spacing between the line wires, from bottom to top, as follows: $\frac{1}{4}$, $\frac{1}{14}$, $\frac{1}{4}$, \frac

"U. S." Poultry Fencing

This cut shows the construction of the ''U. S.'' Poultry. Rabbit and Lawn Fencing. It combines strength, durabitity and neatness of appearance. It is flexible, and readily adjusts itself to uneven surfaces without buckling. Stretches in firm, straight lines without rail supports, and



as compared with ordinary netting of same gauge wire, the "U. S." in the complete fence is much cheaper, as fewer posts are used and no top or bottom rail is required to keep the fence from sagging or narrowing together between the posts. We also use the cabled selvage in the "U. S." Poultry and Rabbit Fence, which, combined with the great multiplicity of horizontal wires, makes it a very strong, durable fence. Bear in mind that the bars in the "U. S." fencing are only two inches apart. Put up in rolls containing 150 lineal feet.

PRICES

TWO-INCH MESH

12	inches	high,	per	roll	\$0.90,	5	roll	lots,	\$0.85
24	inches	high,	per	roll	1.85,	5	roll	lots,	1.75
36	in ches	high,	per	roll	2.80,	5	roll	lots,	2.65
48	inches	high,	per	roll	3.60,	5	roll	lots,	3.40
60	inches	high,	per	roll	4.40,	5	roll	lots,	4.20
72	inches	high,	per	roll	5.25.	5	roll	lots.	5.00

ONE-INCH MESH-150 FEET

18	inches	high,	per	roll	\$3.00
24	inches	high,	per	roll	4.00
30	inches	high,	per	roll	4.75
36	inches	high,	per	roll	5.50

Permanite Roofing



This roofing is manufactured from a high-grade wool felt which is thoroughly saturated and coated with asphalt. It is fire-resisting, water-proof and weather-proof, and will last for a great many years. It is easy and quick to lay; can be used with equal success on a temporary shed, dry-kiln, mill or factory roof, modern o ce building or wherever a good material is required for a flat roof. Nails and cement are enclosed in each roll. Permanite Roofing is made in three weights as follows:

1-ply, 34 pounds per roll; price, \$2.00; 5 rolls, \$ 9.00 2-ply, 44 pounds per roll; price, 2.50; 5 rolls, 11.50 3-ply, 54 pounds per roll; price, 3.25; 5 rolls, 15.00

A roll covers 100 square feet.

POULTRY FOODS

Clover Leaf Chick Food

The experience of poultry raisers is the same the world over. Everybody knows that the first few weeks is the critical time—that's when the distressing when the distressing losses come—losses that are so severe that about one-half of the people who engage in poultry raising are driven out or the business, the weak unused stomachs of newly hatched chicks cannot suddenly accustom themselves to the illy adapted poorly balanced foods that are supplied. Unbalanced food means failure of digestion, and nature of digestion, and that means decrease of an already low temperature, chills, bowel troubles, 'sleepy disease' and almost certain death.



and almost certain death. By using Clover Leaf
Chick Feed you can give the chicks just what nature intended they should have, a food composed of grains (cracked), small seeds, grit, bone, dried sweet meat (to take the place of insects and bugs), charcoal, etc., etc., mixed in the right proportion to produce a quick and profitable growth without loss. You can raise so many more chicks by feeding it, that it is the cheapest food you can buy. Price, 6 lbs., 25c; 25 lbs., 80c; 50 lbs., \$1.50; can buy. Price 100 lbs., \$2.75.

Clover Leaf Forcing Food

Clover Leaf Forcing Feed, as its name implies, is a speciover Leat Forcing Feed, as its name implies, is a special food intended for properly maturing young chicks after they are ready to be weaned from Chick Food, and to carry them along to the age when it is desirable to place before them the larger whole grains. When the chicks are from six to eight weeks old they are able to eat larger particles of grain than are found in our Chick Food.

ticles of grain than are found in our Chick Food.

Our Forcing Feed contains a variety of grain in sizes and quantities exactly suited to the purpose for which it is intended. When used, its alne will be quickly made manifest in the improved appearance of the flock. It insures uniform and even growth with normal, healthy feathering. By the use of this food a strong, hardy chick is produced with more rapid growth than it is possible to attain in any other way. Price, 50 lbs., \$1.35; 100 lbs., \$2.50

Clover Leaf Balanced Ration

This is a complete food ground and ready to mix with water, hot or cold, according to he It contains all season. the ingredients necessary to promote quick growth, to promote quick growth, to produce eggs and to keep the birds in a good condition, summer and winter. Random and haphazard feeding is no longer profitable. Try this food and be con-vinced. We have thorvinced. We have thor-oughly studied the sub-ject of food for fowls and know this mash will give you the desired rekults. It is no more trouble to feed than a bucket of ordinary food, which is often as good as wasted, as the results are not generally satisfactory. To be successful you should make



revery pound of feed show results. Clover Leaf Balanced Ration costs only a little more than wheat or corn and is of twice the value. Try it. Price, 80-lb. sack, \$1.50.

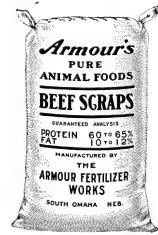
Clover Leaf Scratch Food

This is a balanced ration, all grain poultry food, composed of the choicest grain and other ingredients. In the first place, our factory is sit-uated where we can get the best of northern-grown wheat; to this is added sunflower, corn, oats, peas, kaffir, rape, millet, oyster shells and grit in just the proportion that several years of experience has demonstrated is right. practical poultry man will readily concede that will readily concede that such a diversity of the most valuable feeds will put hens in just the right shape for laying. Price, per 100 lbs.,

\$2.00.



Armour's Beef Scraps



The object in buying Beet Beef Scraps or Meat Meal is to obtain the largest amount of digestible protein possible. as protein is what you are in quest of to balare in quest of to bal-ance your ordinary farm foods and grains. Ar-mour's Beef Scraps con-tain from 55 to 65 per cent of protein, 10 to 12 per cent of fat and less than 5 per cent of ash.

The guarantee on pro-tein gives you an ap-proximate value of the feed, but the percentage of ash contained tells you whether you buying pure meat prod-uct or not. Price, 5 lbs., 25c; 100 lbs., \$3.50.

Armour's Granulated Blood—One great reason why hens do not lay in winter is because they

are not supplied the proper elements to produce the yolk of an egg. This can be remedied by the use of Dried Blood or Beef Scraps. Blood is the highest concentrated form of animal food and prepared so as to include all the elements of the so-called Red Albumen. Use one tablespoonful to six hens once a day. Price, 4 lbs., 25c; 100 lbs., \$5.00.

BLOOD MEAL (Standard), 100 lbs., \$3.00.

Armour's Meat Meal

Armour's Meat Meal contains from 50 to 65 per cent Armour's Meat Meat Meat contains from 50 to 65 per cent of protein, 10 to 12 per cent of fat and less than 5 per cent of ash. Made from hearts, livers, meat scraps and cracklings from United States government inspected animals. Pure, clean, sweet and wholesome. Will keep indefinitely if stored in a dry place. Price, 5 lbs., 25c; 100 lbs., \$3.50.

Alfalfa Meal

The value of some green food for fowls can hardly be The value of some green food for lowls can hardly be overestimated. For a winter food we have found by experience that alfalfa is one of the best for this purpose. It contains more protein, lime and mineral salts in soluble and digestive form than clover, and fowls relish it in either a green or dry state. For producing eggs in winter it has no equal. For little chicks it furnishes the element for growth, making bone, blood, muscle, feather and preventing disease. Price, 100 lbs., \$1.50.

Granite Crystal Grit

The sharpest and hardest grit known. Free from dust, is sharp, hard and clean. Rich in iron, silica, aluminum and mica, a health giving tonic. Viewed under the magnifying glass, it shows myriads of crystals clear as glass and sharp as a diamond. Each crystal has sharp edges, which cut and grind, and grind and cut until the last minute particle is worn away. Thus it will last two or three times longer than any other grit, and is therefore cheaper. We need not enlarge upon the value of grit for poultry. Every poultryman knows how necessary it is to their welfare. In ordering please



state whether you want chick size or poultry size. Price, 100 lbs., \$1.00.

Granulated Charcoal

Our Granulated Charcoal is guaranteed pure. It is not ordinary commercial charcoal, but is especially prepared for poultry, containing no foreign matter, or anything in any way harmful to the chickens or ducks. It is an excellent conditioner, aids digestion, purifies the blood, keeps the crops sweet, regulates the bowels and promotes the general good health of the chicks and adult fowls. Granulated Charcoal is prepared for us in two sizes, viz.: Fine granulated, for all mash rations and for small chicks and a coarser granulated for adult fowls. Price, 10c per 1b.; 10 Pbs., 50c; 50-lb. sacks, \$1.50; 100-lb, \$2.75.

Oyster Shell

Every poultry house or yard should have a pan or box filled with crushed shells, so that the fowls can have access to them at all times. Oyster shells prevent soft shell eggs, makes the egg shells strong enough to carry without breaking and makes eggs larger and heavier. Price, 10 lbs., 25c; 100 lbs., \$1.50.

Western Shell

A good grade of sea shell. Price, 100 lbs., \$1.00.

Granulated Bone

Many poultry men prefer granulated bone to fresh or green bone. Fresh or green bone contains 53 per cent of moisture and 12 per cent of grease, so that when a poultryman buys fresh bones he pays for 65 pounds of useless materials in every 100 pounds he buys. Granulated Bone, while more expensive as a rule than green bone, fully makes up for the difference by its concentrated value. It is made from fresh bones with the moisture and grease taken out, leaving nothing but the phosphate of lime and introgen. Price, 10 lbs., 40c; 100 lbs., \$2.75.

STOCK FEED

Oil Meal

Oil Meal is an extra good food for poultry, cows, horses or calves. If fed to cows, it increases the milk flow and is a material help in calving. If properly fed calves can be entirely raised upon it. Price, 7 lbs., 25c; 100 lbs., \$2.75.

"Proteina" Soy Bean Oil Meal

More Than Half Again as Rich as Linseed Oil Meal—More
Than Double the Feeding Value of Corn

All animals, including horses, young lambs and caives, cat "Proteina" readily without any disturbing effect on digestive organs such as is usually experienced when feeding other oil meals—this feature makes it especially valuable where forced feeding is desired.

"'Proteina" is unequaled as a feed for dairy stock, producing immediate increases in milk and butter fat, as is abundantly proved by actual tests.

"Proteina" is unsurpassed as a poultry food owing to the large amount of albumen it contains.

Price, 7 lbs., 25c; 100 lbs., \$2.50.

Blatchford's Calf Meal

As Rich and Nutritious as Milk at One-Half the Expense 100 Pounds Makes 100 Gallons of Perfect Milk Substitute

Blatchford's Calf Meal is the Standard Milk Substitute of the world. The export trade on it alone is more than the total trade of all other calf meals combined. It is absolutely the only Milk Substitute that contains all the elements necessary for bodilv growth in the correct proportion, and it is the only calf meal that is thoroughly cooked and prepared for digestion by the tender stomach of the very young animal. It pushes pigs, colts, lambs, etc., forward better and quicker than any other food.

Price, 25 lbs., \$1.50; 50 lbs., \$2.75; 100 lbs., \$5.00.

Feed Grains

We keep in stock for feed, wheat, screened cracked wheat, corn, screened cracked corn, barley oats, bran, shorts, etc. As above feeds fluctuate so in value we do not list prices, but will be pleased to quote upon application.

How to make money out of Poultry: Feed Clover Leaf Brands of Poultry Feed.

Stock and Poultry Remedies

GOLD COIN STOCK TONICS AND VETERINARY REMEDIES

"Gold Coin" Horse Tonic FOUR FEEDS FOR ONE CENT



A Horse Tonic for Horses Only

It hardens the muscles. It gives extra strength, speed, style, action and endurance. It aids digestion. It purifies the blood and sleekens the coat. It clears the water, regulates the bowels, cures and prevents disease. It keeps mars and colts healthy. Made from pure roots, barks, seeds and herbs.

GOLD COIN HORSE TONIC—Sold in 25c, 50c and \$1.00 packages. In $12\frac{1}{2}$ -lb. pails, \$2.00; 25-lb. pails, \$3.50; 50-lb. tubs, \$6.50; 100-lb. barrels, \$12.00.

"Gold Coin" Hog Tonic

This is the only scientific preparation on the market today made especially for fattening and conditioning hogs. Every hog raiser needs this great ''Hog Tonic.'' It makes extra money for every farmer who uses it, by saving of feed, rapid growth, quick fattening and prevention of diseases.

FEEDING HOGS—If your hogs are in good condition, feed one measureful of "Hog Tonic" twice a day to each full-grown hog. If not thriving, feed two measurefuls three times a day until in good condition and then reduce to one measureful twice a day.

QUICK FATTENING—For very rapid fattening give two measurefuls of "Gold Coin Hog Tonic" to each hog three times a day. If necessary to hurry the fattening, you may use three or four measures three times a day to each hog. Mix the "Tonic" with the slop water or sprinkle it over the feed.

GOLD COIN HOG TONIC—Put up in 25c and 50c packages; also in 25-lb. pails, \$2.00; 50-lb. tubs, \$3.75; 100-lb. barrels, \$7.00.

"Gold Coin" Poultry Tonic

IT MAKES HENS LAY—It is the greatest egg producer ever invented. A few weeks' rial of it will prove its value. It contains the stuff that helps nens make evers

make eggs.

IT PREVENTS AND CURES CHICKEN CHOLERA—It is the cheapest and best poultry discases, and saves feed. It fattens in half the usual time and makes extra money for you both in increased egg production and in rapid growth of yours forly.

production and in rapid growth of young fowls.

It is not what your poultry eats, but what they digest and turn into flesh and production of eggs that makes money for you.

GOLD COIN POULTRY TONIC—Put up in 25c, 50c and \$1.00 packages; also $12\frac{1}{2}$ -lb. pails, \$2.00; 25-lb. pails,

POULTRY FOOD

ADDE BY

GOLDCOIN STOCK FOOD CO.

"Gold Coin" Cattle Tonic

A Scientific Cattle Tonic for the Dairy

Prepared especially for cattle and sheep. It is the most scientific conditioner and fattener ever discovered. When fed to steers or dry cows it increases the flow of milk and the butter fats (cream). When fed to sheep it increases the growth, mutton and wool. To young stock it gives health and rapid growth. It is a tonic for loss of appetite, and a preventive for scours in calves.

GOLD COIN CATTLE TONIC—Has been a money-maker for thousands of farmers and cattle raisers, and it will make money for you if you feed it faithfully as directed above. It will fatten in 30 to 40 days less time. Put up in 25c and 50c packages; also in 25-lb. pails, \$2.00; 50-lb. tubs, \$3.75; 100-lb. barrels, \$7.00.

"Gold Coin" Remedies

GOLD COIN FOOT REMEDY—Quickly cures sore feet, lameness from corns, sand cracks, quarter cracks, contracted heels, etc. Per can, 50c.

GOLD COIN LOUSE POWDER—Kills lice, ticks, mites on poultry, pigeons, dogs, cats, stock; also plant lice, mites, etc. Per can, 25c.

GOLD COIN LICE KILLER.—To kill lice in hen houses, hog pens, stables, etc. Quarts, 35c; half gallon, 60c; one gallon, \$1.00.

GOLD COIN HARNESS OIL—For oiling harness or preserving any kind of leather. Per can, 25c.

GOLD COIN HARNESS SOAP—For cleaning and polishing harness, buggy tops, shoes and all kinds of leather. Per can, 25c.

GOLD COIN WORM POWDER—Kills all worms and bots in horses, hogs, sheep, dogs, etc. Per package, 50c.

GOLD COIN HEALING OIL—For barb wire cuts, nail injuries, burns, scalds, flesh wounds or cuts, on man or beast. Per bottle, 25c and 50c.

GOLD COIN COLIC CURE—Cures windcolic, bloat, spasmodic colic, stoppage of urine, etc. Per bottle, 50c.

GOLD COIN COLD AND DISTEMPER CURE—A specific for distemper in young or old horses. Quickly cures colds, coughs, etc. Per package, 50c.

GOLD COIN SPAVIN CURE—For curable spavins Quickly reduces all soft swellings as "bog" spavin, blood spavin, swellen joints, inflammation, etc. Per bottle \$1.50.

GOLD COIN CONDITION POWDER—For sick animals. A high-class medicine for fevers and all acute diseases. Per package, 50c.

GOLD COIN GALL CURE—For sores on neck, shoulders and back from rubbing of harness or saddles. All cuts or wounds on horses. Be sure to work the horse while using it. It cures best while working. Per can, 25c and 50c.

GOLD COIN GERM KILLER—The most practical disinfectant for stables and outbuildings. Destroys all disease germs, cleanses and purifies filthy places, thus preventing causes and spread of diseases. Per can, 25c and 50c.

HEAVE CURE—It is the best and cheapest heave cure. It is a recent discovery and is curing cases which all other remedies have failed to touch. Per package, 50c.

LUMP JAW—Cures the disease known as lumpy jaw, which is due to a micro-organism. Price, \$2.00.

"Gold Coin" Compound Liniment

THE WORLD'S GREATEST CURE FOR LAMENESS—Rub the affected parts thoroughly with the liniment. Bandage only when a blister is desired. Per bottle, 50c.

"Gold Coin" Cough and Lung Syrup

This is a cough syrup for horses, cattle, sheep or hogs. If given in time it will prevent many serious diseases, such as pneumonia, bronchitis, consumption, etc. It is important to attend to all lung diseases promptly. Per bottle, 75c and \$3.50.

"Gold Coin" Sheep Dip

GOLD COIN SHEEP DIP—Is a new scientific ''dip'' founded on scientific principles and does what other ''dips'' now on the market will not do. It is cheaper, stronger and safer than any other ''dip.'' It goes further. We can sell it to you cheaper than you can make up a ''dip'' for yourself. Put up in the following sizes: One gallon, \$1.50; 5 gallons, \$6.50; 10 gallons, \$12.00.

CONKEY'S REMEDIES

POULTRY DISEASES -Every poultry raiser should study the subject of Poultry Diseases. It is very impor-tant to know the common symptoms so as to understand what the trouble is and what what the trouble is and what to do for it. It is also important to understand the cause for each disease, and that know bow to prevent trouble in the first place. Most diseases are preventable. especially those which are hardest to curt. If you do not know all about poultry ailments, the best thing is to get a copy of Conkey Book and study it thor-



try Book and study it takes up the subjects of Housing, Feeding, Management, as well as diseases. It covers chickens, turkeys, ducks and geese. One man writes: "I got more good working ideas from Conkey's Poultry Book than any other chicken book I ever read." It is practical and common-sense throughout. Contains 80 pages, well illustrated. Price 50c, but sent FREE for stamps 5s for mailing.

We handle the complete line of Conkey's Poultry Remedies. Following are some of the most important. Read these pages carefully for some of these remedies you will want to keep on hand. It is well to be prepared before trouble starts. Disease comes suddenly, it spreads rapidly. and while you are waiting to get the right treatment, you may lose your flock.

CONKEY'S ROUP REMEDY-Here is one remedy that should be on every poultryman's medicine shelf for use at the very first symptom of sneezing, coughing or moping. Use it as a preventive as well as a remedy and put it in the drinking water when the weather is unsettled, thus avoid all danger of cold and roup. A little of it occasionally is a good tonic. Remember that roup is highly contagious. Neglect to treat promptly endangers your whole flock. But even in neglected stages don't despair, but use Conkey's Roup Remedy according to the special directions for worse cases. We guarantee this treatment -your money back if it ever fails you. Price, 50c and \$1.00; postage, 6c and 12c.

CONKEY'S BRONCHITIS REMEDY-Bronchitis is different from roup, and needs a special treatment which will reach the bronchial tubes. Conkey's Poultry Book tells how to distinguish bronchitis. Price of this special remedy, 50c; postage, Sc. Money back guarantee.

CONKEY'S CHOLERA REMEDY, for indigestion, bowel trouble and all so-called "cholera" ailments of chicks and grown fowls, so common in spring and summer. The sick birds get the medicine as they are very feverish and drink thirstily. Price, 50c; postage, 8c.

CONKEY'S WHITE DIARRHOEA REMEDY is a special preventive and remedy for this dread scourge of incubator chicks. All poultrymen know the symptoms of this terrible disease and the forlorn, humped-up appearance of the baby chicks. Conkey's White Diarrhoea Remedy is successful even in bad cases, if the hardened accumulation around the vent is removed as directed in Conkey's Poultry Boow. The best way is to use it as a preventive. If given to breeding stock it will prevent infection at its source. Given in drinking water. Have it on hand next hatching season and save your chicks. Price, 50c; postage, 7c.

CONKEY'S GAPE REMEDY-Here is another chick saver. Gapes is a troublesome disease, tedious to cure. but this remedy is highly successful. Easily given right along with the water and feed, so there is no troublesome individual treatment. Money back guarantee. Price, 50c; postage, 18c. NOTE-Read Conkey's Poultry Book on how to prevent gapes.

CONKEY'S HEAD LICE OINTMENT is another lifesaver for little chicks. If a chick droops always look for lice, for two or three of these big fellows on head, neck or under wing can actually murder a little chick. It's easy to kill the head lice without hurting the chick if you use Conkey's Head Lice Ointment. Just a touch of it will be enough. Price, 10c; postage, 2c; 25c, postage 4c. Easy and pleasant to use.

NOTE-In Conkey's Poultry Book you will find much useful information little on chicks.



CONKEY'S CHICKEN-POX OR SORE-HEAD REMEDY -Sore-head is getting to be one of the most serious troubles. Treat it promptly and save your flock. Price, 50c; postage, 10c.

CONKEY'S LIMBER NECK REMEDY-You will not lose a bird from limber neck if you give this medicine promptly. Usually one day's treatment is enough. Price, 50c; postage, 12c.

CONKEY'S SCALY LEG REMEDY-Keeps the feet in nice shape and is just the thing for getting show birds ready. Price, 25c; postage, 6c.

CONKEY'S POULTRY LAXATIVE-Very dependable and suited especially to fowls. Purgative or laxative, according to dose. Price, 25c; postage, 6c.

CONKEY'S POULTRY TONIC-For general run-down condition; or you can use it for little chicks that are not making good growth. This is a fine general tonic during moulting season or after recovery from any disease. It is much used for conditioning show birds. Price, 25c; postage, 9c.

CONKEY'S LICE POWDER-When the fowls don't do well always look for lice. If you don't find them, look again. Lice and poultry go together. But lice and profits never go together and you must rid your fowls of lice if you want poultry satisfaction. Conkey's Lice Powder is excellent for ridding fowls of body lice, as it quickly kills these pests when sifted into the feathers of the bird, and it does not injure the fowls or even taint eggs in the nest. Just the thing for setting hens and for dusting the nests. A great big package will be sent you free for stamps 4c, so you can test it. Regular packages, 25c (15 oz.); 50c (48 oz.), and \$1.00 (100 oz.); express extra.

CONKEY'S LICE LIQUID FOR MITES-Spraying walls and painting roosts, cracks and crevices is the only way to rid houses of mites. Conkey's Lice Liquid is a highly satisfactory lice spray and paint as it kills the pests, but is safe to use as it will not catch fire or explode. It is also cheap, as it mixes with water. Use Conkey's Lice Liquid and you will not have to whack up your poultry profits with mites. Price, \$1.00 gal.; 2 quarts, 60c; qt., 35c; expressage extra.

For Stock Books, see Page 74.



CONKEY'S LAYING TONIC—Lots of people don't believe in forcing feeds. But everybody wants eggs in winter when eggs mean money. Conkey's Laying Tonic fills the egg basket in spite of weather. It is not a food, but all tonic medicine to be mixed with the regular feed during seasons when fowls get sluggish and want to loaf instead of lay. It is very economical, as you mix it in small quantities with the regular feed, the packages containing all pure medicines, no filler or foodstuff whatever. Prices, 25c., 50c, \$1.00; pails, \$1.60 and \$3.00; express extra.

CONKEY'S DOG REMEDIES

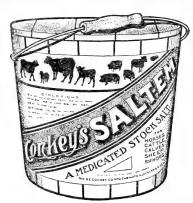
CONKEY'S DOG REMEDIES-Very dependable. We

CONKEY'S DISTEMPER REMEDY-Price, 50c; postage. 10c.

CONKEY'S MANGE REMEDY-Price, 50c; by express, 75c. Also for eczema, canker, sore ears, ringworm, etc.

CONKEY'S WORM DROPS-Price, 50c; by express, 65c.

CONKEY'S STOCK REMEDIES



SALT-EM

Conkey's Medicated Salt

What it will do: Rid your stock of worms. Increase appetite. Improve digestion. Save waste of feed. Tone up liver and kidneys. Increase circulation. Clean the blood. Keep the system open. Make thrifty gains from feed. Ward off disease.

Sold on a positive guarantee that if it does not give perfect satisfaction money will be refunded cheerfully. Prices: 100-pound kegs, \$6.00; 40-pound pails, \$2.75, 20-pound pails, \$1.50; 10-pound pails, \$0c.

Remember, we sell all Conkey Remedies on guarantee. Your money back if any Conkey Remedy ever fails you. THE INLAND SEED COMPANY.

CONKEY'S STOCK TONIC—An occasional conditioner must be used for all farm stock or they cannot be pushed to the limit of production. Conkey's Stock Tonic is a perfect enditionar for cows or feeding cattle, horses, sheep or fect enditionar for cows or feeding cattle, horses, sheep or nogs. It keeps up appetite, insures full digestion of the ration, prevents waste of feed, that is, brings you the most possible return for every pound of feed. Not a food itself, but all medicine, to be mixed with regular feed, by the spoonful, or with salt (1 lb. to 90 lbs, salt) to make home-made stock salt. Not a particle of filler in this, you get the filler out of your own feed bin, at home prices. Money back. Prices: 1 lb., 25c; 2½, 1bs., 50c; 5 lbs., \$1; 12 lbs. (pail), \$2; 25 lbs. (pail), \$3.50. Postage on small packages by mail 1c per oz. Express extra on pails. Buy it by pailfuls. You can afford to. It pays for itself every time. every time.

CONKEY'S WORM REMEDY-A prompt and powerful remedy for stock badly infested. Price, 50c.

CONKEY'S HORSE TONIC-A stimulating medicine for debilitated and exhausted conditions. Put out especially for fine bred horses. Price, \$1.00.

CONKEY'S HEAVE REMEDY-Corrects digestive disturbance as well as nervous derangement. Tones organs back to health. Price, \$1.00.

CONKEY'S COLIC REMEDY-A life-saver and should be on hand for emergency. Prices, 50c and \$1.00.

CONKEY'S FISTULA AND POLL EVIL REMEDY-Effective and very humane. Price, \$2.00.

NCONKEY'S DISTEMPER AND COUGH REMEDY-For all cases of cough, cold, chill and fever, epizootic, distemper or strangles, pink eye, etc. Price, 50c and \$1.00.

CONKEY'S HEALING POWDER-A wonderful gall cure. For chafes, sores, etc. A perfect dry pressing (antiseptic) for surgical cases. Prices, 25c and 50c.

CONKEY'S GALL SALVE-A healing ointment for sores, cuts, harness and saddle galls, chafes, etc. Prices, 25c and 50c.

CONKEY'S FLY KNOCK-ER-All the time your stock are pestered by flies you are losing your profits. We guarantee Conkey's Fly Knocker as an absolutely satisfactory fly spray. it on your horses and cattle night and morning and see the difference in the work they do for you. Not an expense, because it makes money for you, besides sav-ing time in handling, and bringing peace to you and the stock. Does not injure the stock. Does not injure the hide, odor will not taint milk. Keeps flies off. kills every one it hits, prevents lice and — h. saves shoes and floors from stamping. saves milk, saves flesh saves feed. Price, qt., 50c; 2 qts., 75c; gal., \$1.25; express or freight.



CONKEY'S PAIN LOTION-For soreness, throbbing pains, inflammation, cuts, wounds, burns. Price, 50c.

CONKEY'S HOOF REMEDY-Keeps your horse's hoofs in nice shape, thus preventing accidents. Price, pt., 50c; qt., 75c; ½ gal., \$1.25; 1 gal., \$2.00.

CONKEY'S ABSORBENT-Takes place of blistering and firing. Cures lameness, removes blemishes. Price, \$1.00.

CONKEY'S BAG OINTMENT-A penetrating, softening application which soothes quickly. A remedy for many bag troubles. Price, 25c and 50c.

BOOK ON TIVESTOCK MANAGEMENT-OUR SPECIAL FREE OFFER-If you are interested in farm animals send us name and address and stamps ten cents and we will mail you one copy CONKEY'S STOCK BOOK, a new big hand-book of 224 pages. Positively "The best book yet on livestock!"

THE INLAND SEED COMPANY,

Spokane Washington.

CONKEY'S NOX-I-CIDE-The best way is not to have any diseases in your flock. It is always easier and cheaper to prevent than to cure. Conkey's Nox-i-cide is an allaround preventive, as it keeps the quarters sanitary and kills the germs. Use it as a dip, disinfectant, spray or as a lice liquid. Mixes with water, so it's cheap enough, every gallon making from 50 to 100 gallons ready to use. Price, \$1.50 gallon. Also in smaller sizes, 2 qts, 90c; qt., 60c: pint. 35c.

ZENOLEUM

Disinfectant Animal Dip Lice-Killer

One gallon of Zenoleum makes 100 gallons of positive disinfectant and germicide. Won't poison; won't hurt you; won't explode or burn. Kills vermin, cures skin trouble. Invaluable as a remedy for diseases of poul-try and all live stock. Kills lice and cures mange. Disinfects incubators





AVENARIUS CARBOLINEUM

Avenarius Carbolineum is without doubt the most effective exterminator of mites and lice on pountry, poultry houses, lice on horses, cattle and hogs, ticks on sheep, fleas on cats and dogs.

For Chickens

For chickens simply paint walls, roosts, floors and roofs of the poultry houses or barns after first thoroughly cleaning them. It does not make a particle of difference whether the interior is of wood, plaster or tar paper. One coat of Avenarius Carbolineum kills instantly all mites, bugs, nee and vermin. It is also a strong antiseptic and disinfectant. The result is healthy chickens and more eggs. On the other hand a neglect to destroy vermin means the destruction of your chickens, especially very young ones, by disease.

For Horses, Cattle and Sheep

Sprinkle some on an old blanket and tie around the animal for several hours. Also paint the stalls.

For Hogs

Sprinkle a little Avenarius Carbolineum diluted with

water on the bedding and also paint the hog pen.

Avenarius Carbolineum is not only an effective remedy for vermin but the most effective preservative for woodwork and paint known to the world. It is very powerful and therefore economical and at the same time the quickest, surest and most effective lice killer. Price, qt., 50c; gallon,

Tobacco Dust

For use in dust baths or nests. A chean and effective exterminator of lice. Price, per ib, 10c; postpaid, 25c.

Poultry Pepper Compound

This is a splendid tonic at all times. A small amount sprinkled in with a hot mash will stimulate the circulation and increase egg production. Price, per pkg., 25c; pestpaid, 40c; by freight, 5 lbs., \$1.00.

Lice Powders

BUHACH—Per oz., 10c; 1/4 lb., 30c; lb., \$1.00. PERSIAN INSECT POWDER—Lb., 50c.

Copperas

A small piece placed in drinking water is a good tonic for chickens. Per lb., 10c.

Foods and Specialties for Birds Dogs & Fish

CANARY—Per lb., 10c; postpaid, 20c. HEMP—Per lb., 10c; postpaid, 20c. RAPE—Per lb., 10c; postpaid, 20c. MILLET—Per lb., 10c; postpaid, 20c. CUTTLE BONE—Two for 5c. SUNFLOWER-Per lb., 25c postpaid; 12 lbs., \$1.00,

express or freignt.

Bird Manna

Keeps cage birds in constant song, improves their plumage and prevents disease. Price, 15c; postpaid, 20c. SPRATT'S SONG RESTORER (Dunlap's)—A treat and

tonic for canaries, linnets, and all seed-eating birds. Price,

tonic for canaries, findes, and an securearing order. Price, 15c; bl mail, 20c.

SPRATT'S BIRD LICE DESTROYER (Henning's)—
For dusting the feathers. Price, 15c; by mail, 20c.

SPRATT'S BIRD TONIC (Henning's)—For the prevention and cure of all diseases which cage birds are subjected.

tion and cure of all diseases which cage birds are subjected to. Price, in bottles, 15c; not mailable.

SPRATT'S PARROT FOOD—A mixed food for parrots which should be kept before them all the time. Price in cartons, 15c; postpaid, 25c.

SPRATT'S "DEFIANCE" MOCKING BIRD FOOD—The purest fod obtainable for mocking birds, rooms, 15c. thrushes, and other soft-billed birds. postpaid, 25c. Price in tins, 25c;

SPRATT'S FISH FOOD—The best food for rearing trout, c. Used at the leading trout hatcheries. Price, 10c; postpaid, 15c.

SPRATT'S PUPPY EISCUITS (The Standard Puppy Food)—A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about one month old and they should be continued until such time as their teeth become sound and strong, usually when they are about six months old. Follow directions on each package. Price, 35c, express or freight.

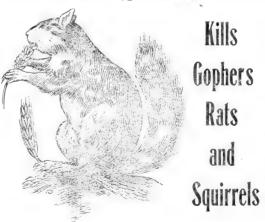
Dog Biscuit

SPRATT'S-The analysis of our biscuits show that they are, weight for weight, equal in nourishment to fresh raw beefsteak and superior to it as a food for dogs. The standard dog food; a staple and constant food for all breeds of dogs. Price, 3-lb. cartons, 35c; express or freight.

Insect Powder Blowers

JUMBO—Price, 25c; postpaid, 35c. DEFENDER—Price, 15c; postpaid, 25c.

WOODLARK SQUIRREL POISON



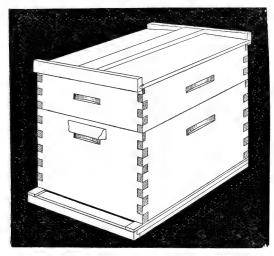
"The Brand that Hills"

Requires no mixing preparation—always ready for When you buy demand the best. Get the "Woodlark" brand. Money back if not as claimed. Price 35c. Postpaid 55c.

Bee Supplies

DOVETAILED HIVES—The dovetailed hive is now the leading hive, as it contains many of the most desirable features of the various hives for the rapid handling of bees, and is one of the cheapest and best hives manufactured. It is dovetailed together, or rather put together with lock corners.

DESCRIPTION—The body is made of pine planed on both sides, % inch thick, and is fitted with metal rebets of an improved style. Outside of body is 13 % x20 i.wehes, and 9½ inches long. The body holds eight Hoffman frames. L size, and a division board. The frames hang below the top edge of the hive, so that there is a bee space above them, but the bottoms of the frames are flush with the bottom edges of hives, the bee space being made by the projection of the sides and can be enlarged or decreased by



inverting bottom board. The bottom is 14x21 inches. The cover is made with grooved cleats at each end to prevent warping. The supers are the same size as the body of hive, but only half the depth, so that when two are put together they make a full-depth body. This hive is cheaply but accurately made, as the edges are square in vlace of being beveled as in the Simplicity. The inside width of the body is $12\frac{1}{2}$ inches, giving room for eight frames and a division board. The sections in super are held closely together by wedge or tiphtening spring, which allows the use of 1% or 7 to a foot sections. There are objections to using sections other than 4% x4%, as they require special sized shipping cases and special sized cartons; and there are other reasons that will suggest themselves to those who have had experience in using other than the regular sized goods. We put up this hive for shipment in lots of five by simply crating the pieces together, or packing them in solid crates.

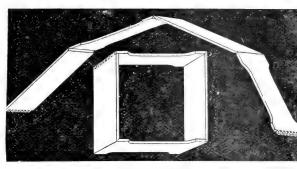
NO. 1 DOVETAILED HIVE (COMPLETE WITH ONE SUPER)—Consists of 1 bottom board, 1 body, 1 super, 1 cover, 8 Hoffman brood frames, 1 division board, 2 wedges for super, 6 section holders, 6 slotted separators. Price, 5 K. D., \$8.75; 1 nailed, \$2.00.

SECTION HOLDERS—Each, 3c: 100, \$2.25. SLOTTED SEPARATORS (SAWED)—Ten for 15c; 100, \$1.00.

SUPERS—Same as above hive. Each, 75c; 5 in flat, \$3.25.

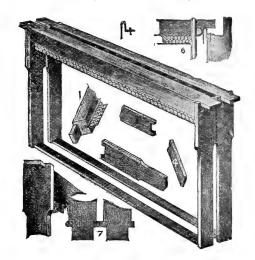
Section Honey Boxes

NO. 1 SECTIONS—Are made of the choicest white basswood lumber, and all are perfect in finish and free from defects. They are not all snow-white, but vary from that to light cream color. Price, per 25, 25c; 100, 75c; 500, \$3.50; 1,000, \$6.50.



NO. 2 SECTIONS—Selected from the best grade, sell at a price less than the No. 1. Most of them are equal to No. 1 except in color; some have dark spots, saw marks, or other blemishes which exclude them from the No. 1 grade. Price, per 25, 25c; per 100, 70c; per 500, \$3.25; per 1,000 \$6.00.

Hoffman Brood Frames



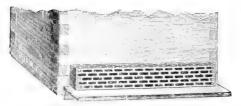
The Hoffman Improved Foundation Fastening Frames are the latest and best brood frames out. The top bar is made with a beveled strip which holds the foundation absolutely in place, perfectly straight and exactly in center to top bar. Anyone can put foundations in these frames very rapidly. It seems to combine in itself nearly all the good features and for a hanging frame it is the best self-spacer we know of. It economizes labor in that it can be handled in groups of three or four; and any particular frame can be removed without thumbing over nearly all the other frames in the hive to get room. Price, per S, 30c; 100, \$3.25.

Van Deusen Wax Tube Fastener



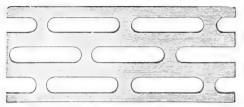
For fastening the foundation sheets to thin top-bars there is nothing better than the Van Deusen wax tube. It is simply a brass tube half an inch in diameter, six inches long and tapering. This is filled with hot wax and the point is then slowly drawn along the edge of the foundation in contact with the top-bar, leaving a fine stream of hot wax to cement it. Price, 20c each; by mail, 25c.

Bee Entrance Guards



These are to admit workers, and to exclude drones. After the drones are all out, fix the guards over the entrance and at night the drones can be destroyed. Price, 15c; by mail, 20c.

Queen Excluding Zinc



We carry in stock one of the best zincs, with oblong perforations. This is used between the upper and lower stories, to prevent the queen going up above. It is also used in making entrance guards, queen and drone traps, etc. Price, 30c each; by mail, 45c.

Spur Wire Imbedder



Price, 20c; by mail, 25c.

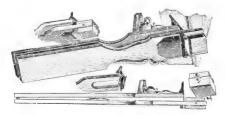
The latest spur wire imbedder is a most decided improvement over the old one. The teeth are wider and grooved in the direction of the circumference midway across front of teeth, so that the wheel will easily follow the wire. The result is beautiful work.

Foundation Fastener



PARKER'S—The Parker Fastener is a cheap machine for fastening starters. With a little practice it can be made to work very satisfactorily. Price, each, 25c; by mail, 50c.

Daisv



DAISY—This is the best for putting starters into sections. Nothing could be more simple or more easily operated than this machine, and we are sure it will put starters in better and faster than any machine before produced. With this a boy or girl will put starters in about 500 sections per hour. Price, without lamp, \$1.00; with lamp, \$1.25.

Manum's Swarm Catcher

This swarm catcher is the best article of its kind on the market, and it will be found a valuable addition to the appliances of the apiary. Price, without lamp, \$1.00; with lamp, \$1.25.



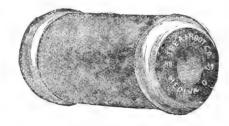
Queen Cages



Price of Queen Cages, as above, 5c each. These are complete, without candy.

The cover, to insure prompt delivery, is printed in exact fac-simile of the cut. On the reverse side are printed directions for introducing Queens,

Tinned Wire



No. 30 Tinned wire seems to be the most suitable of any for wiring frames. We keep it in stock on spools as listed.

						P1	RICE	Post
	s Furn		_				Doz.	Each
1/4-1p.	Spools	No.	30	\mathbf{T} inned	Wire\$	0.15	\$1.50	\$0.06
½-Ib.	Spools	No.	30	Tinned	Wire	.25	2.50	.10
1-lb.	Spools	No.	30	Tinned	Wire	.40	3.75	.18

Veils

A great necessity and very cheap: cotton. Each, 60c postpaid.

Gloves, Rubber



Rubber Gloves for the protection of the hands and wrists are almost indispensable in handling bees. Gents' sizes -0, 11 and 12, each, \$1.50; by mail, \$1.60.

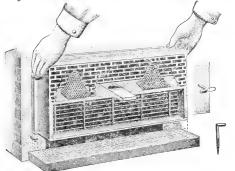
For Bee Books, see Page 74.

Honey Extractors

For those who want the smallest and lightest machine, as |well as one moderate in price, this is the best in the market. It is a non-reversible, two-frame machine; that is, the frames must be pulled clear out of the extractor, reversed in the air, and put back into the baskets the other side to. The Novice will handle the product of fifty or more colonies in good seasons. Price, \$11.00.



Alley's Combined Drone and Queen Trap



A perfect non-swarming arrangement. Each, 50c; by mail, 70c.

The "Higginsville" Smoker

This smoker is, as its name implies, strictly a Higginsville product. It is a hot blast, and has a 3½-inch fire box, and the nozzle is detachable to admit of filling or cleaning. It has as strong a blast as any smoker made. A bar of folded tin running parallel with a bellows protects the hand from coming in contact with the hot fire box. Price, each, \$1; weight, 1¾ lbs.

The Higginsville Smoker



Acme Smoker

This is undoubtedly the best cold blast smoker on the market. It has no tube in the fire box to clog. It throws a large volume of smoke at right angles to the fire box without a curved nozzle to lessen the blast. In fact, it is the berfection of smokers. The large size has an arrangement whereby the draft can be regulated as required. Price, 75c; weight, 13/ lbs.



Porter Bee Escape



No apiarist can afford to be without bee-escapes any more than he can afford to be without a bee-smoker. In taking off honey it is the greatest labor saving device that has been introduced in late years. It avoids shaking heavy supers to get the bees out. Price, 25c.

Feeding

Bees are fed for two purposes: To stimulate broodrearing or to supply them with necessary stores for winter. For stimulating, a pint o half of syrup daily either at the entrance at night or inside the hive, should be given until the required amount of brood is reared. In preparing for winter it is better to give the necessary stores all at one feed.

Simplicity Feeder



This is to be filled with syrup by mixing together granulated sugar and water in equal proportions by measure and stirring or heating until thoroughly dissolved. This feeder may be placed at the entrance at night, over the broadframes, by placing on top of the hive or in the broadnest itself, if a couple of frames are removed. Price, 10c each; by mail, 15c each.

The Use of Comb Foundation

There is little question but that it pays to use foundation in full sheets in the brood frames and sections, especially the latter. If you think you cannot afford so much you should at least have a strip for a starter. It will help you much more than it costs you, in gettine straight, even combs. You can use a starter any width from one inch up. In sections by far the best results are obtained by using a bottom starter not over ¼ inch, and a full top starter reaching to within ¼ to 3-16 of an inch of the bottom starter.

Table of Prices of Comb Foundation

	In	Lots	of
	1-lb.	5-lb.	#0-Th.
Medium Brood	\$0.60	\$0.58	20.57
Thin Super	.70	.68	.65
Not less than 1 pound mailed. We	conside	r this	a dan-

Cogshall's Bee Brush

gerous way of sending these goods.



This is a sort of whisk broom especially adapted and made for brushing bees. The strands are thinned out and longer, so as to give a soft, pliable sweep to the combs. Price, by mail, 25c.

EGGS FOR HATCHING

In all undertakings it is of the utmost importance to have a good foundation or to begin right. This is as true in the poultry business as in any other undertaking, hence too much care cannot be given to the securing of eggs from strong, healthy stock, that will have strong germinating qualities and that in turn will produce strong, healthy chicks. We have selected with the greatest care those breeders that have made a special study of their stock, and have made their selection and their matings, not alone from the viewpoint of feathers, but have made a coose study in continually selecting their breeding pens from their best laying stock, and by so doing have produced strains that ranks high in the annual production of eggs.

In order that our customers may know exactly whose eggs they will receive we give the name of the different breeders. These eggs are carefully packed and with reasonable care by the transportation companies should arrive at their destination safely. Prices quoted are F. O. B., Spokane. In order that our customers may rest assured that they will receive eggs from the breeders listed, we desire to state that we are only handling the eggs as listed from the breeders mentioned and will not handle any others.

others.			
Bantams			
Breeder and Variety S. J. M. Arant, Japanese	Setting \$2.50 2.00	\$	100 \$
Minorcas			
J. M. Fink, S. C. Black J. G. Dickson, S. C. Buff J. G. Dickson, S. C. Buff	2.00	4.50 6.00 Specia	
Leghorns			
Waikiki Farm, S. C. Buff	$\begin{array}{c} 2.00 \\ 1.50 \end{array}$	$\begin{array}{c} 5.50 \\ 3.50 \end{array}$	10.00 6.00
Special H. J. Fuller, S. C. Brown H. J. Fuller, S. C. Brown H. J. Fuller, S. C. Brown H. J. Fu [†] ler, S. C. Brown	$\begin{array}{c} 2.00 \\ 2.50 \end{array}$	6.00 6.00 Specia Specia	
Orpingtons			
J. M. Arant, S. C. White	2.50	7.50	15.00
Rhode Island Re	eds		
Waikiki Farm, S. C	2.00	5.50 6.00 Specia	$10.09 \\ 10.00$
Rocks			
George S. Gaub, Barred Waikiki Farm, White	$\begin{array}{c} 2.00 \\ 3.00 \end{array}$	5.50 Specia	10.00
Pheasants			
Breeder and Variety Waikiki Farm, English Ring Neck		\$2.50	
\mathbf{T} urkeys			
Waikiki Farm, White Holland		. 3.00	35c ea.
Ducks			
Waikiki Farm, Indian Runner Waikiki Farm, Pekin Waikiki Farm, Pekin		. 2.00	Special
• Geese			

Waikiki Farm, White Embden\$2.00 for 5

Standard Text and Reference Works by Recognized Authorities

Poultry

Postnaid

Artificial Incubating and Brooding	\$0.50
The Chick Book	
Eggs and Eggs Farms	.50
Egg Record and Account Book	.25
Poultry Houses and Fixtures	.50
Reliable Poultry Remedies	.25
American Standard of Perfection, 290 pages	2.00
Conkey's Poultry Book, 80 pages	.05
Farm Poultry, 341 pages	1.45
How to Keep Hens for Profit, 380 pages	1.05
The Philo System, 95 pages	1.00
Ct o ola	
Stock	
The Feeding of Animals, 450 pages	4.05
The Horse, 400 pages	
Diseases of Animals	
Conkey's Stock Book, 225 pages	
Conkey's Stock Book, 225 pages	10
n -	
Bees	
A B C and X Y Z of Bee Culture, 500 pages	1.75
How to Keep Bees for Profit, 348 pages	
: to	
Farming and Gardening	
Dry Farming	1.65
Fertility of the Land, 421 pages	
Fertilizers, 335 pages	
Irrigation and Drainage, 502 pages	
irrigation and Diamage, 902 pages	1.70

Cultural Directions

 Milk and Its Products, 311 pages.
 1.70

 Bush Fruits, 537 pages.
 1.70

 Principles of Fruit Growing, 516 pages.
 1.65

 The Nursery Book, 365 pages.
 1.70

 The Pruning Book, 537 pages.
 1.70

 Plant Breeding.
 1.40

 Manual of Gardening, 534 pages.
 2.20

 The Principles of Vegetable Gardening, 458 pages.
 1.70

 The Forcing Book, 266 pages.
 1.35

 The Spraying of Plants, 399 pages.
 1.35

 Mushroom Culture, 32 pages.
 .15

Annuals from Seed The Dahlia House Plants The Sweet Pea Asparagus Mushroom Culture Hot-Beds and Frames Cabbage and Cauliflower Celery The Vegetable Garden

For a 50c order of package Flower or Garden Seed, any one of the above cultural directions will be sent free.

NUMBER OF PLANTS TO THE ACRE

Dis. Apart No. Pla	nts Dis. Apart	No. Plants Di	is. Apart	No. Plants	Dis. Apart	No. Plants
12 x 1 in522,5	25 x 18 in	15,520 36	3 x 36 in	4,840	60 x 60 in	1,745
12 x 3 in174,2					8 x 1 ft	
12 x 12 in 43,5					2 x 3 ft	
16 x 1 in382,0					8 x 8 ft	
18 x 1 in348,		13,068 48			10 x 1 ft	4,356
18 x 3 in116,1	60 30 x 20 in		8 x 18 in		10 x 6 ft	
18 x 12 in 29.0					10 x 10 ft	
18 x 18 in 19,5					12 x 1 ft	
20 x 1 in313,6			8 x 36 in		12 x 5 ft	
20 x 20 in 15,6						
24 x 24 in 10.8) x 36 in	2,901	16 x 1 ft	2.722
24 x 1 in261,3	60 36 x 24 in	7,260 60	0 x 48 in	2,178	16 x 16 ft	170

QUANTITY OF SEED REQUIRED

Quantity	per Acre		Quantity per Acre
Alfalfa8			
Alsyke6	to 15 lbs	Kale, 1 oz. to 150 feet of drill	
Artichoke, 1 oz. to 500 plants	6 oz.	Kale. Thousand Headed	
Asparagus, 1 oz. to 500 plants		Kohlrabi, 1 oz. to 150 feet of drill	
Barley	to 75 lbe	Kaffir Corn	e to v 15a
Beans, Dwarf, 1 lb, to 100 feet of drill			
Beans, Tall, 1 lb, to 150 hills			
			3 lbs.
Beet, Garden, 1 oz. to 50 feet of drill			
Beet, Sugar, 1 oz. to 50 feet of drill			
Beet, Mangel Wurzel, 1 oz. to 50 feet of drill			
Broccoli, 1 oz. to 2,000 plants		Nasturtium, 1 oz. to 50 feet of drill	
Brussels Sprouts, 1 oz. to 2,000 plants		Oats	75 lbs.
Broom Corn			8 lbs.
Buckwheat		Onion, 1 oz. to 100 feet of drill	4 to 8 lbs.
Cabbage, 1 oz. to 1,500 plants	½ lb.	Onion for sets	30 to 20 lbs.
Carrot, 1 oz. to 125 feet of drill	3 lbs.	Onion Sets, 1 lb. to 75 feet of drill	
Cauliflower, 1 oz. to 2,000 plants	3 oz.	Parsley, 1 oz. to 300 feet of drill	3 lbs.
Celery, 1 oz. to 5,000 plants		Parsnin 1 oz to 200 feet of drill	6 lbs.
Cheat		Page Garden 1 lb to 50 feet of drill	60 lbs.
Chicory, 1 oz. to 100 feet of drill		Peas Field	100 lbs.
Clover, White and Alsyke 6 t	o 10 lbs.	Bonney 1 or to 100 plants	
Clover, White, for Lawns	o 100 lbs.	Potatoos	400 lbs
Clover, Red, Mammoth and Crimson	o 20 lbs.	Pumpkin, 1 oz. to 30 hills	3 to 4 lbs
Collards, 1 oz. to 2,000 plants		Radich 1 oz to 100 fact of drill	
Corn, Sweet, 1 lb. to 200 hills		Pana Dwarf Feeer	5 to 10 lbs
Corn, Field8	to 12 lbs.	D-1-1 1 1-0 1 1-01	
Corn Fodder8		D	60 to 80 lbs
Corn, Pop8	to 12 lbs.	Salsify, 1 oz. to 50 feet of drill	
Cress, 1 lb. to 100 feet of drill	1 lb.	Saisity, 1 02. to 50 feet of drift	100 lbs
Cucumber, 1 oz. to 60 hills2	to 3 lbs.	Spinach, 1 oz. to 100 feet of drill	
Egg Plant, 1 oz. to 2,000 plants	4 oz.	Spinach, I oz. to 100 feet of drill	2 11.
Endive, 1 oz. to 100 feet of drill		Squash, Summer. 1 oz. to 25 hills	5 IDS.
Flax, for seed, 30 lbs. to acre; for fiber		Squash, Winter, 1 oz. to 12 hills	4 IDS.
Grass, Lawn, 1 lb. to 300 square ft		Sugar Cane	10 lbs.
Grass, Kentucky Blue, Canadian Blue	20 lbs	Sunflower	8 lbs-
Timothy6		Todacco, 1 oz. to 10,000 plants	
Red Top, in chaff, 60 lbs.; solid.		Tomato, 1 oz. to 2,000 plants	4 oz.
Rye Grass. Oat Grass. Fescue Grasses		Turnip, 1 oz. to 150 feet of drill	2 lbs.
Orchard Grass 40		Vetches, Spring	60 to 90 lbs.
Hemp 40		Vetches, Winter	30 to 60 lbs.
	00 100	Wheat	

WEIGHTS OF SEED PER BUSHEL

	Lbs.			Lbs.	Lbs.
	per bu.			per bu.	per bu.
Alfalfa Clover	60	Oats		32	Flax56
Red Clover	60	Barley		48	Buckwheat50
White Clover	60	Corn		56	Rye56
Alsyke Clover	60	Orchard Gr	ass	14	Wheat60
Timothy	45	Hungarian		48	Sugar Cane for Fodder50
Blue Grass	14	Common M	illet	50	Peas, Field60
Mixed Grasses	14	German Mil	let	50	Top Onion Sets28
English Dro Gross	20	Homn		4.4	•

USUAL DISTANCES FOR PLANTING

Beans, Bush, drills 2 to 3 feet apart.
Beans, Pole, 3 to 4 feet each way.
Beets, Early, drills 12 to 18 inches apart.
Beets, Late, drills 2 to 3 feet apart.
Beets, Late, drills 2 to 3 feet apart.
Beackberries, erect growing, 6 to 9 by 4 feet.
Blackberries, Mammoth and Himalaya, 8 by 12 feet.
Cabbage, Early, 16 by 30 inches.
Carrots, drills 1 to 2 feet apart.
Corn, Sweet, 3 to 3½ feet by 9 to 24 inches.
Corn, Field, 3½ to 4 feet each way.
Cucumber, 4 to 5 feet each way.
Cucumber, 4 to 5 feet each way.
Currants, 5 by 3 feet.
Egg Plant, 3 by 5 feet.
Lettuce, drills 18 inches apart.
Melon, Musk, 5 to 6 feet each way.
Caluflower, 2 by 2 to 2 by 3 feet.
Apple Trees, 15 to 20 feet each way.
Cauliflower, 2 by 2 to 2 by 3 feet.
Apple Trees, 20 to 30 feet each way.
Asparagus, 3 to 4 by 2 feet.
Grapes, 8 by 8 to 10 by 12 feet.

Melon, Water, 7 to 8 feet each way.
Onions, drills 14 to 20 inches apart.
Parsnips, drills 18 to 36 inches apart.
Peach trees, 18 to 24 feet each way.
Pear Trees, Standard, 20 to 25 feet each way.
Pear Trees, Dwarf, 12 to 15 feet each way.
Pear, Grills 2 to 3 feet apart.
Pepper, 15 to 18 inches by 2 to 2½ feet.
Plum Trees, 15 to 20 feet each way.
Potatoes, 12 to 18 inches by 2½ to 3 feet.
Pumpkins, 8 to 10 feet each way.
Quince Trees, 15 feet each way.
Radish, drills 10 to 18 inches apart.
Raspberries, 6 to 8 by 3 feet.
Rhubarb. 2 to 4 feet by 4 feet.
Salsify, drills 18 to 24 inches apart.
Spinach, drills 12 to 18 inches apart.
Squash, Bush, 3 to 4 feet by 4 feet.
Squash, Running, 12 feet each way.
Strawberries, Hills, 36 by 18 inches.
Strawberries, Matted Rows, 48 by 12 inches.
Sweet Potatoes, 2 feet by 3 to 4 feet.
Tomato, 4 feet by 4 to 5 feet.

-75-

	1 2 3 4	::	+	13	9	1-	x	10	11	12	13 1	4 15	16	-1	x -	5 5	1 21	22	23 2	24 2	5 26	27	28	29	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	=	Total	
January																										_=		
February																												
March																												
April																				-						==		
May																										==		
June																										==		
July																										==		
August																										===		
September	-																									==		
October																												
November						-																						
December						-																				==		

PROFIT IN HENS

Statistics show that in the neighborhood of one hundred carloads of Eggs are shipped into Spokane each year. This, figured into round numbers, gives Seventeen Million Two Hundred and Eighty Thousand (17,280,000), some eggs. Some twelve years ago, upon the arrival of the first car of Cypher's Incubators shipped here, the writer well remembers the poultry men saying: "What will you do with all these incubators! If you sell all those here, eggs won't be worth anything." The years have rolled by, and many cars of incubators have gone from Spokane; but eggs are higher and scarcer today than then.

At the time this is going to press, the women throughout this country are agitating and working for the lower prices of eggs. It strikes us that in this vicinity, agitation for increased winter production is the solution. Probably not 30 per cent of all the poultry men in this vicinity make expenses during the winter months. These 30 per cent have the proper buildings, know how and what to feed, and give their hens the care necessary to produce winter eggs.

In order to assist the poultry men, we have prepared from the best grains, alfalfa, etc., the following:

CLOVED LEAF CHICK FEED

CLOVER LEAF FORCING FEED.

CLOVER LEAF BALANCED RATIONS.

CLOVER LEAF SCRATCH FEED.

In addition to these, oyster, grit, bone, meat and sprouted oats should bt fed generously.

Clover Leaf Brand

We wish to call especial attention to our Clover Leaf Brands of Poultry Feed. We use only the best of grains in their makeup, and our constant aim is to produce the very best article that can be produced. These brands of feed are handled by merchants in nearly every city or village in the Inland Empire. If unable to procure them of your merchant, we will be glad to forward them as per prices listed below.

CLOVER LEAF CHICK FEED

Price, 6 lbs., 25c; 25 lbs., 80c; 50 lbs., \$1.50; 100 lbs., \$2.75.

CLOVER LEAF FORCING FEED Price, 50 lbs., \$1.35; 100 lbs., \$2.50.

CLOVER LEAF BALANCE RATION Price, 80 lb. sack \$1.50.

CLOVER LEAF SCRATCH FEED Price, 100 lb. bag, \$2.00.

CLOVER LEAF GRIT Price, 100 lb. bag, \$1.00.

Watch for the brand, a Clover Leaf on every sack.

THE INLAND SEED CO., 913-915 First Ave., Spokane, Wash.

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